



COMBAT

France 1940

German Infantryman **VERSUS** British Infantryman

David Greentree



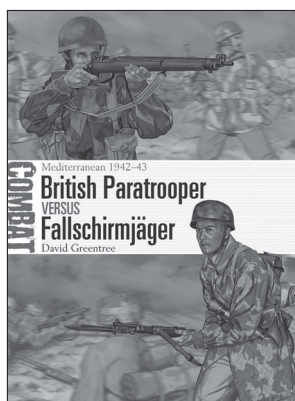
Author

David Greentree graduated in History at York before taking an MA in War Studies from King's College London and qualifying as a lecturer in Further Education. In 1995 he accepted a commission in the Royal Air Force and has served in a variety of locations, including Afghanistan and Oman.

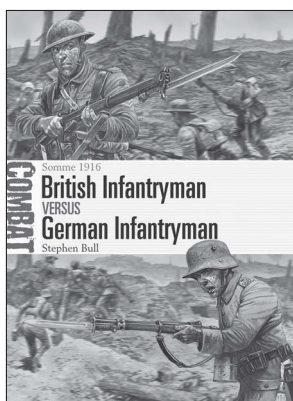
Illustrator

Adam Hook studied graphic design, and began his work as an illustrator in 1983. He specializes in detailed historical reconstructions, and has illustrated Osprey titles on subjects as diverse as the Aztecs, the Ancient Greeks, Roman battle tactics, several 19th-century American subjects, the modern Chinese Army, and a number of books in the Fortress series. His work features in exhibitions and publications throughout the world.

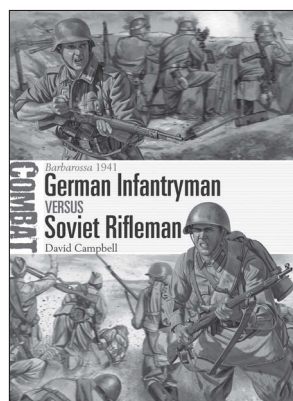
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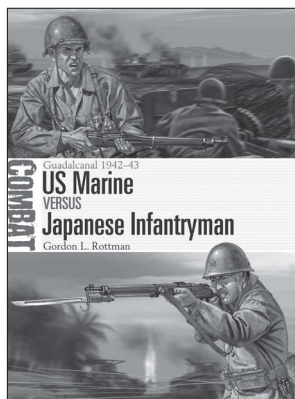
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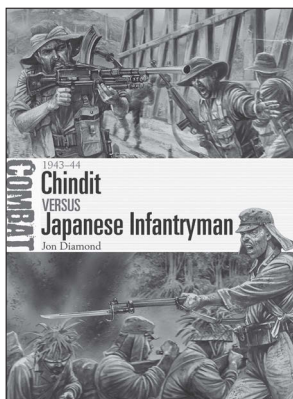
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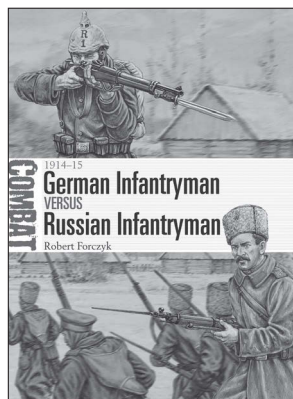
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Illustrated by Adam Hook

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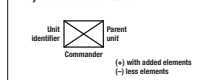
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Army Group	Army	Corps	Division	Brigade	Regiment	Battalion
Company/Battery	Platoon	Section	Squad	Infantry	Artillery	Cavalry
Airborne	Unit HQ	Air defence	Air Force	Air mobile	Air transportable	Amphibious
Anti-tank	Armour	Air aviation	Bridging	Engineer	Headquarters	Maintenance
Medical	Missile	Mountain	Navy	Nuclear, biological, chemical	Ordnance	Parachute
Reconnaissance	Signal	Supply	Transport movement	Fortress or static	Fortress machine gun	

Key to unit identification



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Comparative ranks

German

Generalfeldmarschall
Generaloberst
General der Infanterie, etc.
Generalleutnant
Generalmajor
Oberst
Oberstleutnant
Major
Hauptmann
Oberleutnant
Leutnant
Hauptfeldwebel
Oberfeldwebel
n/a
Feldwebel
Unterfeldwebel
Unteroffizier
Stabsgefreiter
Obergefreiter
Gefreiter
Oberschütze
Schütze

British

field marshal (FM)
general (Gen)
lieutenant-general (Lt-Gen)
major-general (Maj-Gen)
brigadier (Brig)
colonel (Col)
lieutenant-colonel (Lt-Col)
major (Maj)
captain (Capt)
1st lieutenant (Lt)
2nd lieutenant (2/Lt)
warrant officer class I (WO I)
warrant officer class II (WO II)
platoon sergeant-major (PSM)
staff sergeant (S-Sgt)
sergeant (Sgt)
corporal (Cpl)
n/a
n/a
lance corporal (L/Cpl)
n/a
private/rifleman (Pte/Rfman)

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Introduction

In the late morning of 26 May 1940, Maj Lord Godfrey Cromwell took a Bren gun from a fallen soldier and fired a short, quick blast at German figures dashing across the road in front of him. Along with a few riflemen from his D Company of 2nd Battalion, The King's Royal Rifle Corps (2nd KRRC), Cromwell was taking cover behind a roadblock thrown across the street in order to stop German tanks gaining access to the old town of Calais. Earlier a similar obstruction on a canal bridge had been blasted apart and *Schützen* from 10. Panzer-Division, supported by tanks, had begun their final assault. Despite gallant resistance, within hours Calais would be taken and 30th Brigade, to which 2nd KRRC belonged, would cease to exist, as would 3rd Battalion, Royal Tank Regiment (3rd RTR), fighting with them. Sgt Bill Close, troop sergeant of 3rd RTR's scout-car platoon, thought their rushed

British infantryman near Roubaix, April 1940. 2/Lt Francis Williams of 2nd KRRC told how in Calais, 'We had a mortar but no ammunition. We also had a few hand-grenades kept in the hotel for an emergency' (Williams: 12). Four grenades had been issued to each man; L/Cpl Edward Doe of the same battalion had been 'given two but I never ever pulled the pin on one, never had the chance; I'd never fired one, I'd never thrown one, I'd never seen one go off' (quoted in Buck 2013: 9:15). (© IWM F 3552)





L/Cpl Doe was surprised the German soldier 'wasn't tied down with packs and equipment like we were. Furthermore, he was armed with an automatic. He could just point it and let go! We had to fire a shot and eject the cartridge and reload again' (quoted in Levine 2010: 122). This was an exaggeration, as in 1940 only the section leader had a submachine gun. Here, a German soldier in 1940 is carrying extra bandoliers of ammunition. The Karabiner (Kar) 98k bolt-action rifle had an internal magazine, which made it easy to carry; however, only five rounds were carried as opposed to ten in the Lee-Enfield. The Kar 98k was accurate to 500m (550yd) and with telescopic sights to 800m (875yd). The *Feldbluse* was shorter than earlier versions, which made embarking and disembarking from motorized transport easier. The German infantryman of 1939–40 relied upon hooks on the belt to carry his equipment; from 1941 a Y-strap across the shoulders would be widely used to support the kit. (Cody Images)

deployment from Britain a few days earlier 'must have been some ghastly mistake at the War Office' (Close 2013: 26). The deployment of motorized formations to hold the city, although reflecting the strategic reality of the German exploitation towards the Channel ports, would be symptomatic of the unimaginative British approach to combined-arms warfare. Furthermore, the method by which the Germans in Calais put together all-arms *Kampfgruppen* (battle groups) for specific battlefield tasks was indicative of a military ethos that encouraged co-operation and individual initiative.

Combat capabilities in 1940 were governed by decisions taken in the interwar years. The period challenged the British Army to make best use of the internal combustion engine in circumstances of financial stringency, and Lt-Gen (later FM) Sir Philip Chetwode, Deputy Chief of the Imperial General Staff (DCIGS) in 1920–22, wanted 'a much harder hitting, quicker moving and, above all, a quicker deploying division than we ever had before' (quoted in French 2001: 36). He intended to replace the large conscript army used during World War I with a small, mobile, well-equipped force designed for short Imperial policing operations. However, the economic downturn in the late 1920s led to drastic reductions in defence and by the mid-1930s, with the rise of Nazi Germany, the ability to fight a European conflict was also required. While mobility was by then assured, most units seemed to lack the adaptability

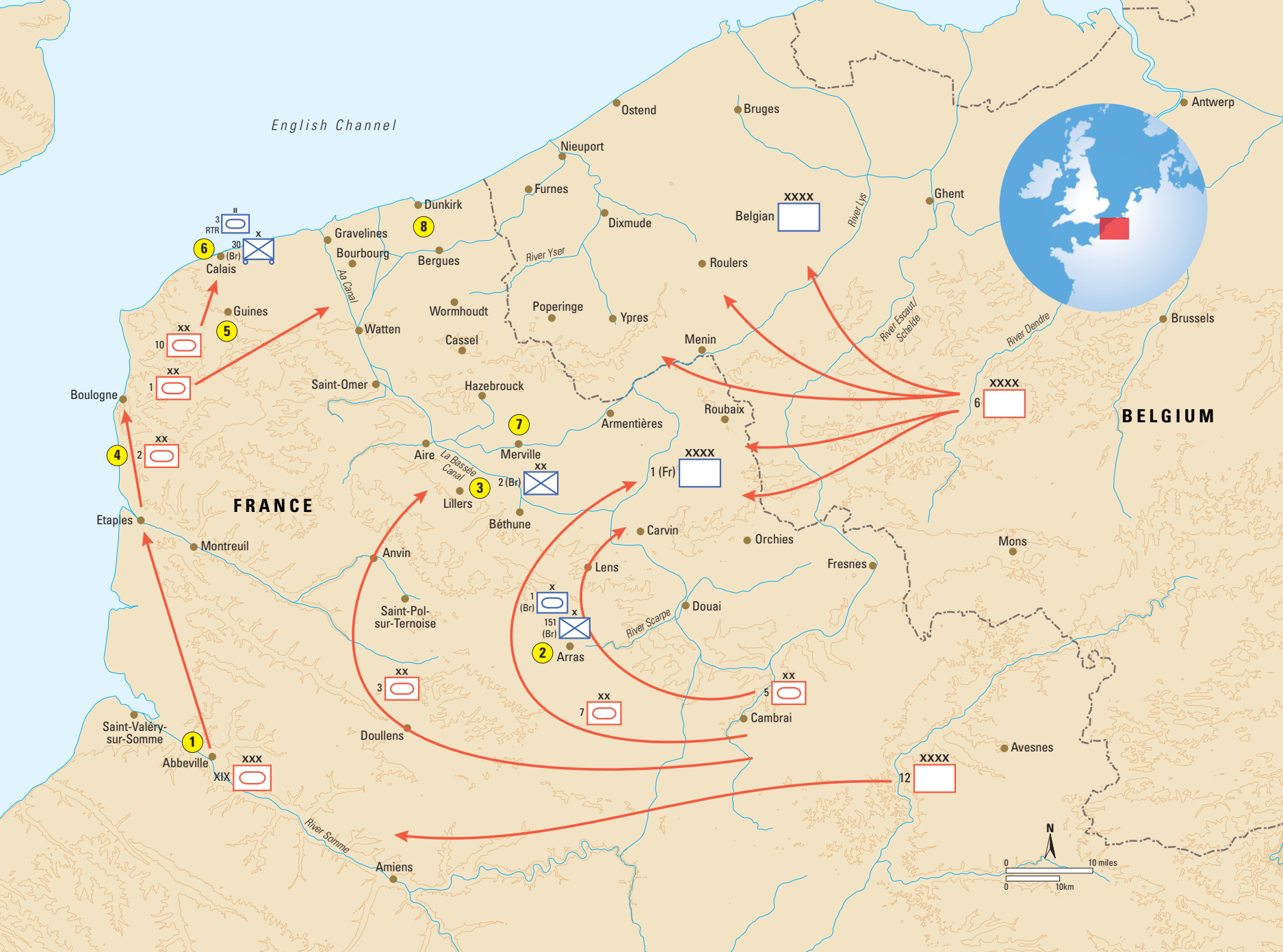
BEF sector, Northern France, 20–28 May 1940

MAP KEY

- 1 20 May:** Ten days after German forces including nine Panzer divisions attack British and French positions in central and southern Belgium and further south in the Ardennes, General der Panzertruppen Heinz Guderian's XIX. Armeekorps (mot.) reaches the Channel coast near Abbeville, and begins to exploit north towards the Channel ports.
- 2 21 May:** Brig J.H. Churchill's 151st Infantry Brigade and Brig D.H. Pratt's 1st Army Tank Brigade counter-attack south of Arras and engage elements of Generalmajor Erwin Rommel's 7. Panzer-Division.
- 3 22 May:** Units of Maj-Gen Sir H.C. Loyd's 2nd Division, including 6th King's Own, take position on the western flank of the pocket forming around the Channel ports, along La Bassée Canal.
- 4 22 May:** Generalleutnant Rudolf Veiel's 2. Panzer-Division attacks Boulogne.
- 5 23 May:** Generalmajor Ferdinand Schaal's 10. Panzer Division is released from reserve and takes over the advance on Calais from Generalleutnant Friedrich Kirchner's 1. Panzer-Division, which moves towards Dunkirk.
- 6 23 May:** Brig Claude Nicholson's 30th Infantry Brigade and Lt-Col Reginald Keller's 3rd RTR arrive in Calais. On 24 May, a halt order is issued to the Panzer divisions, but is rescinded 48 hours later.
- 7 26–27 May:** 2nd Division fights a series of desperate actions along canal lines, including at Merville on 27 May, when the German advance resumes.
- 8 28 May:** By this date an Allied perimeter has coalesced around Dunkirk, sufficiently strong to allow the evacuation of the BEF over the next few days. The Panzer divisions are again halted and redeploy for an attack across the River Somme.

of their German counterparts: command and control was autocratic and prevented junior commanders from seizing battlefield opportunities; doctrine emphasized consolidating rather than exploiting gains; and mobility rather than firepower predominantly influenced the procurement of weaponry.

Rather than concentrating all mobile assets into separate divisions, Britain gave some mobility to all its infantry formations. The regular 1938-type infantry division, comprising an armoured reconnaissance regiment and three infantry brigades, benefited from motor transport, with each infantry platoon receiving a truck to carry its equipment. In addition, to exploit armoured breakthroughs, 'motor' divisions (that included a couple of infantry brigades with enough trucks to transport all its infantry) were created from Territorial Army (TA) reservist divisions. However, despite the infantry's partial motorization, by 1939 Britain was without an established, all-arms formation. The prevailing view that tanks could not be given operations of strategic significance had hindered the formation of an armoured division. In 1926, the Experimental Mechanized Force (EMF), consisting of a light-tank battalion, a medium-tank battalion, a machine-gun battalion and five motorized-artillery batteries, had been set up; but during most exercises tanks were separated from motorized infantry because Royal Tank Corps officers disliked the slow speed of the infantry's wheeled vehicles. In 1934, exercises bringing together 1st Tank Brigade and the partially mechanized 7th Infantry Brigade were a fiasco because of lack of training, personality clashes and inexperienced umpires. Only in December 1937 was the 'Mobile Division' belatedly formed, from a couple of armoured-cavalry brigades equipped with armoured cars, a tank brigade, and a couple of 'mechanized' infantry battalions – including 2nd KRRC and 1st Battalion, The Rifle Brigade (1st RB) – but force composition meant the division was more suited to reconnaissance missions rather than encounter battles. The formation was further hampered because tank brigades had no integral field artillery; instead, close-support tanks mounting howitzers were expected to deal with anti-tank guns.



In the 1920s, Germany had established a small, highly mobile force structure of ten divisions, following British theories that advocated attacking the enemy's command structure to render it inoperative. This approach gained adherents who argued that, instead of mass infantry armies, Panzer ('armoured') divisions combining mobility and firepower should be the force structure adopted to achieve this aim. In the 1930s, such proponents included Generalmajor (later Generaloberst) Heinz Guderian; according to Generalmajor (later Generalfeldmarschall) Erwin Rommel, however, many still 'clung fast to the axiom that the infantry must be regarded as the most important constituent of any army' (quoted in Cooper 1978: 150). Some articles in the *Militär Wochenblatt* ('Military Weekly') argued that raiding warfare undertaken by armoured forces was 'a very delicate matter, because although it offers a tempting chance it also represents a great and terrible risk' (quoted in Cooper 1978: 152). Generalleutnant (later Generalfeldmarschall) Erich von Manstein, who formulated the plan for the armoured strike through southern Belgium in May 1940, observed that most German strategists only wanted to use mobile troops to assist the infantry 'to outflank and to encircle the enemy' (quoted in Cooper 1978: 137).

In March 1935, with the introduction of 12 months' compulsory military service, the German Army – renamed the Heer in that year – expanded to 36 divisions, and by mid-1939 increased to 52 active and 51 reserve divisions (1.83 million men). With this rapid expansion, resources available to armour proponents were limited. Yet, the importance of supporting arms for the tanks was apparent; organization and weaponry were selected to deal with specific tactical problems and senior officers were taught how to form *Kampfgruppen* for different battlefield situations. Furthermore, although the decision to expand rapidly into a mass conscript army diluted professionalism, junior officers and NCOs were encouraged to use their initiative on the battlefield.

There were insufficient trucks for more than four motorized-infantry divisions and rather than having permanent formations, Generaloberst Ludwig Beck, Chief of the General Staff (1935–38), considered – though rejected – assigning them to infantry formations for specific assignments. He made a clear distinction between motorized-rifle regiments belonging to Panzer divisions and motorized-infantry divisions that filled the void between Panzer and infantry divisions. The former were known as *Schützen* (after 19th-century elite German rifle units) whose recruitment and training was dealt with by the *Inspekteur der Kraftfahrkampfruppen* (Inspector of Combat Motor Transport Troops); the latter were infantry divisions given trucks for rapid movement.

In May 1940, because of the German infantry's reliance on horse-drawn transport, many senior officers thought only operations on internal lines of communication over relatively short distances were feasible. Most also suspected that motor-transport shortages created insupportable logistical implications for armoured forces launched on strategic raids and wanted Panzer divisions to assist infantry divisions to envelop and surround the enemy. However, an opportunity to launch them on a decisive, war-winning strike against the British Expeditionary Force (BEF) would be available, and time and again British infantrymen would be called upon to fight desperate engagements to ensure their army's evacuation from Dunkirk. In such a situation, both sides knew that a British counter-attack combining tanks with infantry against exploiting German armoured spearheads would be likely.

The Opposing Sides

ORGANIZATION AND DOCTRINE

German

Although lacking practically any experience of tanks in World War I and not permitted tank technology following the peace, the Germans realized mobile formations had a future because during World War I such operations had strategic effect. In 1916, a truck-mounted German infantry battalion captured the Iron Gate, a critical logistical route through the Carpathian Mountains where the Danube entered the Rumanian heartland, and held out until relieved by a bicycle brigade. Each cavalry division had a *Jäger* battalion carried in trucks and bicycles, and during the 1920s, of ten divisions permitted by the Treaty of Versailles, three were cavalry. By 1934, 3. Kavallerie-Division was completely motorized and each infantry division had a motorized battalion to carry men and supplies, which included a company each of armoured trucks, armoured cars, anti-tank guns and motorcyclists.

In 1934, when Versailles was fully renounced, military theorists proposed combining a *Jäger* brigade of three motorized-



General der Panzertruppen Heinz Guderian, depicted here in May 1940 in Bouillon, was the principal advocate of the Panzer division. A signals specialist in World War I, in the 1930s he won rapid promotion by being a fierce proponent of all-arms warfare. He realized 'the effectiveness of the tanks would gain in proportion to the ability of the infantry, artillery, and other divisional arms to follow them in an advance across country'; however, he noted that 'The development of tracked vehicles for the tank supporting arms never went as fast as we wished' (quoted in Cooper 1978: 156). In 1940 less than 20 per cent of vehicles in a Panzer division had any cross-country mobility. (Bundesarchiv Bild 146-1980-004-32 Foto: o. Ang)

On 15 January 1936, the *Heereswaffenamt* (Army Ordnance Office) – responsible for the design and development of weaponry – declared that a tank ‘should be armoured against machine gun fire, armed with a machine gun and guns to engage live targets, and [have] high cross-country mobility with the capability to cross wire entanglements and trenches’ (quoted in Jentz 1996: 41). Medium tanks (PzKpfw III with 3.7cm gun) would deal with enemy tanks, and a small number of heavier tanks (PzKpfw IV with short-barrelled 7.5cm gun) would neutralize anti-tank and machine-gun positions, which, according to an after-action report dated 24 May 1940, was ‘a task that absolutely belonged to artillery for close cooperation with the infantry’ (quoted in Jentz 1996: 131); however, because tank manufacture was held back by Versailles, light, training tanks dominated. The PzKpfw I was equipped with a couple of machine guns and the PzKpfw II a 2cm gun and a machine gun; in the interim the PzKpfw 38(t), mounting a 3.7cm gun and a couple of machine guns, was a worthy substitute for the PzKpfw III. In 1936, *leichte Divisionen* that each included a Panzer battalion were formed to seize strategic points rapidly, fight delaying actions and conduct pursuit operations. During the Polish campaign, independent Panzer brigades reinforced the *leichte Divisionen*, which were converted to Panzer divisions (6., 7., 8. and 9.) by permanently assigning them after the campaign. Here, Generalmajor Rommel is depicted in May 1940 beside a Czech-made PzKpfw 38(t), of which his 7. Panzer-Division had 91. His PzRgt 25 and PzAbt 65 also had 24 PzKpfw IV, and 102 PzKpfw I and PzKpfw II. (Bundesarchiv Bild 146-1998-043-20A Foto: o. Ang)



infantry battalions with a couple of tank brigades, and Generaloberst Beck ordered a study into armoured divisions. After an exercise in 1935, which brought together a tank brigade and a motorized-infantry brigade, three Panzer divisions were established. By proposing that, by 1 October 1939, as well as a reserve of 24 Panzer battalions, each of 12 army corps should have a Panzer brigade or at least a battalion, Beck – much to Guderian’s annoyance – ostensibly advocated that tanks should be distributed among the infantry. However, Beck always thought attaching a tank battalion to each infantry division ‘would be wasteful and a misapplication’ because the tank was ‘a weapon that must be employed in mass and utilize surprise’; instead, attachments were ‘a basis of camouflage and surprise’ done to mislead the enemy as to their future employment and for ‘training the other branches, especially the infantry, in coordination with tanks’ (quoted in Jentz 1996: 25). He also thought that each of the nine Panzer brigades ‘should be accompanied by approximately one reinforced motorized infantry regiment’ (quoted in Jentz 1996: 24). Because of the lack of motorized divisions, Guderian suggested forming more cavalry divisions to substitute for them, but cavalry proponents in the 1930s focussed on reconnaissance rather than exploitation and his proposal was rejected because of a shortage of horses.

The limitations of Versailles also focussed German minds on how mobile forces would fight. *Panzertruppen* would support the infantry attack, combat enemy tanks and be employed operationally with other motorized weapons. Generaloberst Beck believed independent tank brigades would be deployed as required ‘to prepare the way for infantry divisions or be employed in conjunction with the motorized infantry divisions’ (quoted in Jentz 1996: 63), and to ensure Panzer units could perform all tasks, each Panzer battalion had light companies and a heavy company (companies also contained light and medium platoons).

British

In World War I, the British had more experience of mobile forces than the Germans. In the interwar years, with the mass production of the automobile, the military theorist Capt Basil Liddell Hart envisaged a major role for mechanized infantry and – despite others such as Maj-Gen J.F.C. Fuller, who wanted to use them as fortress troops to hold positions won by tanks – keenly advocated co-operation between tanks, infantry and artillery. In 1929, all seemed secure when FM Sir George Milne, Chief of the Imperial General Staff (CIGS) 1926–33, championed ‘mobility, activity, and quickness from the beginning’ (quoted in French 2001: 16). Manoeuvres recreated attacks by cavalry divisions around enemy flanks but, by the early 1930s, with the reduction in cavalry and their adoption of armoured cars, the infantry, supported by independent tank brigades, were expected to effect a breakthrough. This would then be exploited by the Army’s single armoured division (Mobile Division) and a small number of motorized (‘motor’) divisions.

In 1937 FM Sir Cyril Deverell, CIGS 1936–37, confirmed that ‘mechanisation ... holds out the only hope that an Army can achieve results’ (quoted in French 2001: 16); the regular 1938-type infantry division provided every platoon with a truck, but did not have the necessary firepower to make the decisive impact doctrine demanded. Battalion-support companies that once had World War I-vintage Vickers medium machine guns were re-formed into rifle companies and in the 1937 infantry handbook the artillery’s support to frontal attacks was emphasized. Each division had 72 artillery pieces available, but indirect-fire provision was inflexible – battery size was large and artillery requests by battalion commanders, which went back to divisional HQ and competed with each other, delayed fire missions. The Royal Air Force (RAF) was no substitute as it had no doctrine, specific aircraft or trained pilots to carry out close air support (CAS). In 1928, the Air Ministry asked the Army not to encourage their pilots to conduct CAS; rather, liaison and reconnaissance would be their role in the support of ground troops.

In 1940, the single Mobile Division, renamed 1st Armoured Division, was not a balanced all-arms formation; there were three RTR and three cavalry



During World War I, while tanks were used as ponderous gun platforms, by 1918 armoured cars, equipped with a light gun or a machine gun, were rushed – along with motorcycle- and truck-mounted troops – to vulnerable areas of the battlefield to exploit breakthroughs, provide information on enemy troop movements via radio, and defeat enemy delaying positions. In addition, cavalry formations of the Desert Mounted Corps fought dismounted in small groups to turn enemy positions. In the 1930s, the Royal Tank Corps assigned on average one independent tank brigade per four infantry divisions. Here, A11 tanks are advancing with infantry; but the Mobile Division’s infantry, according to Gen Sir J.T. Burnett-Stuart, responsible for training them, were ‘not meant to fight side by side with your tanks in the forefront’ (quoted in French 2001: 42). (TM1764-B3, The Tank Museum)



By 1939, 2/Lt Davies-Scourfield of 2nd KRRC thought his battalion 'quite well-trained' and 'the best shooting regiment in the Army', but familiarity with tanks was limited as 'the armoured regiments were still in the process of being re-equipped' (Davies-Scourfield 2004: 2). Recruits completed six months of basic training at the rifle depot before specialist training with the motor-training battalion. In September 1939, the battalion, depicted here, was perfecting tactical movements in Dorset. (© IWM ARMY TRAINING 2/26)

regiments equipped with light and fast cruiser tanks, and only a couple of motor battalions, which along with a battalion of field artillery, engineers, anti-aircraft and anti-tank units comprised an integral support group that would fight as a separate echelon. According to Royal Armoured Corps Training Instruction No. 1 its duty was 'to provide a pivot from which armoured action may be developed, to assist the armoured brigades in unsuitable country, and to take ground won by armoured action' (quoted in Gudmundsson 2004: 135). More motor battalions were needed and would have been available if cavalry regiments had agreed to conversion, but they wanted the reconnaissance role and in 1938 were all put in light tanks. Unlike its German counterpart, the British General Staff was so unconcerned with maintaining an all-arms formation that on 20 April 1940 1st Armoured Division's motor battalions were detached to form 30th Infantry Brigade for service in Norway.

RECRUITMENT AND MORALE

German

Manpower limitations set by Versailles meant the best and brightest were recruited and only those who exhibited potential to serve a rank higher were sought. Of 34,000 officers in 1918 only the best 4,000 were retained; in the cavalry over 40 per cent were from the nobility, but vanity was not tolerated and a selfless devotion to duty was expected. In the 1920s, officer intake was small and by 1928 the Reichswehr had 15 applications per post. Service was popular because pay and living standards had dramatically improved and discipline had relaxed. In the mid-1930s, British observers of the Heer were surprised at 'the comparative freedom of its discipline, its increased appeal to spirit, and decrease of the punitive element' (quoted in French 2001: 125). During training, after witnessing another recruit being bullied by a *Feldwebel* and *Gefreiter*, Alexander



Soldiers were taught to see their role in context. Decorations were awarded on how actions impacted upon the wider operational situation, and few would go to private soldiers. For example, of 16 awards of the Iron Cross First Class in 7. Panzer-Division for crossing the River Meuse/Maas on 13 May, seven went to those with *Offizier* ranks, six to men with the rank of *Oberfeldwebel*, and three to those ranked as *Feldwebel*. (Bundesarchiv Bild 146-2009-0061 Foto: o. Ang)

Stahlberg – the son of a factory owner from a well-respected noble family in Stettin, who joined the Heer so he did not have to join the Nazi Party – informed his superiors; both instructors were thrown out of the regiment. Indoctrination convinced most recruits that the state was restoring a sense of national identity; according to the Oberbefehlshaber des Heeres, Generaloberst Walther von Brauchitsch, the *Panzertruppen* in particular were to be ‘infused with the highest daring ... offensive spirit, ardour, inner and outer fine deportment, and dependability’ (quoted in Jentz 1996: 64).

In the mid-1930s the Heer started on a massive expansion that diluted the quality of its leadership. A shortage of officers led to more NCOs commanding platoons. Formations were divided and put together with other units to form new units. Schützen-Regiment 3 of 3. Panzer-Division was established in Berlin in late 1935, I. Bataillon mostly from Reiter-Regiment 11 (1. Kavallerie-Division) and II. Bataillon from Infanterie-Regiment Meiningen. After the Polish campaign, motorised divisions lost a regiment, which were split up to give the Schützen regiments an extra battalion; on 1 November 1939 I. Bataillon/Infanterie-Regiment 69 of 20. Infanterie-Division (mot.), which recruited in the Hamburg area, became III. Bataillon, Schützen-Regiment 3. Similarly, Schützen-Brigade 10 of 10. Panzer-Division, established on 27 October 1939, received II. Bataillon/Infanterie-Regiment 69 on 1 November. Infanterie-Regiment 86, created on 6 October 1936 in Mühlhausen as part of 29. Infanterie-Division and motorized on 12 October 1937, on 1 April 1940 was renamed Schützen-Regiment 86 as part of 10. Panzer Division and its III. Bataillon was redesignated I. Bataillon/Infanterie-Regiment 69. Kavallerie-Schützen-Regiment 6 of 7. Panzer-Division was formed on 10 November 1938 in Saalfeld, from Infanterie-Regiment 103. The regiment was redesignated a *Schützen-Regiment* on 20 March 1940.

In 1935 military conscription was introduced, which enabled the Heer to incorporate 300,000 new recruits per year. Recruits aged 18–24 were mandated to serve six months in the Reichsarbeitsdienst, a labour service for civic works, before they joined the Heer for a further two years. Deferments for students

BELOW The British Army of the 1930s has been characterized by many historians as a class-based institution that prevented junior leaders from exhibiting initiative, discouraged rank-and-file soldiers thinking for themselves and rewarded social background rather than professional competence. Here, a British officer, with eye patch, shows his frustration at being captured in May 1940. Officers were selected by a local board of officers, often with no military experience, and in the 1930s only 5 per cent were ex-rankers. Promotion was by seniority and many thought meritocracy would undermine morale among those passed over. Still, Cpl Nugent, a signaller of B Company, 2nd KRRC, told how at Calais: 'They never failed to inspire us with their courageous acts, and were to be seen at all dangerous positions. Their inspiring leadership undoubtedly encouraged us to prolong a desperate fight' (quoted in Buck 2013: 15:27). Some, such as Lt-Col (later Lt-Gen Sir) Euan Miller, CO 2nd KRRC, were veterans of World War I. In contrast, Maj Peter Jeffreys of 6th DLI attended Sandhurst in 1929, was the son of a regular officer and had served abroad (the only other regular officer in Jeffreys' battalion was the quartermaster; there were also six regular warrant officers). TA officers could be a mixed bag as, until three years' service was completed, they did not have to pass a competence exam; but many were ex-regulars: Maj J.S. Poole, a TA officer recalled to 2nd KRRC, had served in World War I and was appointed B Company commander until a younger major could be found. (Bundesarchiv Bild 121-0446 Foto: o. Ang)



and those engaged in vital economic enterprises could be obtained. Recruits swore unconditional obedience to Hitler, as supreme commander of the German armed forces, and the German people. Promotion reflected a priority for those who served in combat units, taking six months from *Obersoldat* to *Gefreiter* as opposed to one year in another field unit, and a soldier could be promoted to *Unteroffizier* from *Gefreiter* without first having to be an *Obergefreiter* (acting corporal) or *Stabsgefreiter* (an administrative position). From *Unteroffizier* to *Feldwebel* took a year in a combat unit or two years in another field unit. However, in a combat unit, if an *Obergefreiter* was an acting squad leader or an *Unteroffizier* was an acting platoon leader, he could be promoted regardless to *Unteroffizier* or *Feldwebel*, respectively, after four months in that position. An *Unteroffizier* was normally promoted to *Feldwebel*, missing the rank of *Unterfeldwebel*.



British

For the rank and file the economic crash in the early 1930s, which prompted a reduction in pay and allowances, degraded conditions of service and, because volunteers chose their own cap badge, the brightest and better-educated tended to stay away from the infantry, which was mostly the home for labourers and handymen. From May 1939, 34,500 militiamen aged 20–21 were called up for six months' full-time service before a four-year TA engagement; however, each TA battalion had to throw off a cadre to form another battalion. Only on 1 September were all males aged 18–41 liable for military service and four out of ten new recruits were placed in the infantry. Unfit men could be rejected;

for 6th DLI more common was the loss of recruits to industrial employment, which led to their replacement by 100 recruits from The King's Shropshire Light Infantry. In late March 1940, while in France, another 100 recruits appeared from the Infantry Base Depot. Still, notwithstanding the injection of new recruits, the BEF could only field ten infantry divisions (five regular and five TA), with another three TA divisions arriving to carry out labouring duties.

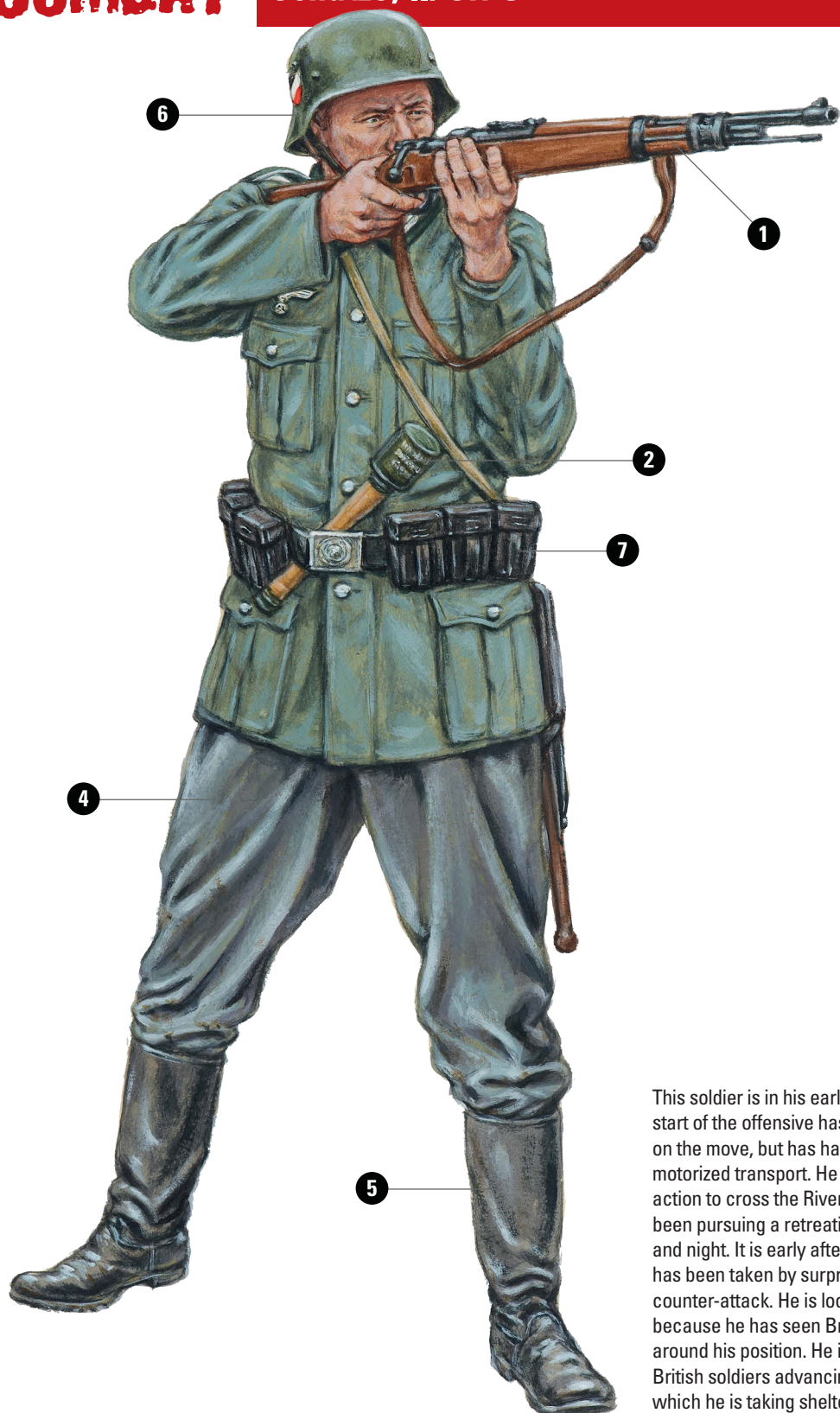
As a peacetime regular battalion, 2nd KRRC included experienced reservists and professional soldiers like Rfmn Edward Doe, who had joined the battalion in 1928 for seven years and in 1939 was fulfilling his five-year reservist commitment. In January 1938, Thomas Sandford, whose father had served in the artillery, volunteered. In April 1939, reservists started arriving for 12 days' training, but drafts were being dispatched to 1st KRRC in Burma. However, in July the Rifle Depot forwarded all recruits to 2nd KRRC to make room for the militia and numbers increased. Officers would sometimes only realize their soldiers' qualities after sharing the experience of battle with them. On 26 May 2/Lt Philip Pardoe found Rfmn Swares in a shell crater 'beside me with his Bren gun absolutely calm. Back in England I had found him very quiet and hard to get to know, but here his best qualities came out. Nothing worried him. Occasionally he made a remark with his slow sense of humour and I realised I would rather have him with me, than almost anyone I know' (quoted in Buck 2013: 15:20).

Most soldiers recruited in wartime wanted to return to civilian life as soon as possible and only developed a sense of camaraderie in reaction to strict discipline. Their morale was maintained by teamwork and a sense of belonging, which was enhanced by having regional Infantry Training Centres (ITCs). An exception was 6th King's Own. The battalion, which had disbanded on 5 March 1919, re-formed at Dover in February 1940, but had little connection with its parent regiment in Lancaster. A few officers joined from 7th Holding Battalion, The King's Own Royal Regiment and the regiment's ITC. Others, and most NCOs, were posted in from other units after completing a course at the School of Military Engineering. The majority of rank and file were from various TA formations that attended No. 1 Infantry Pioneer Training Centre (The King's Own Royal Regiment) at Sutton Coldfield.



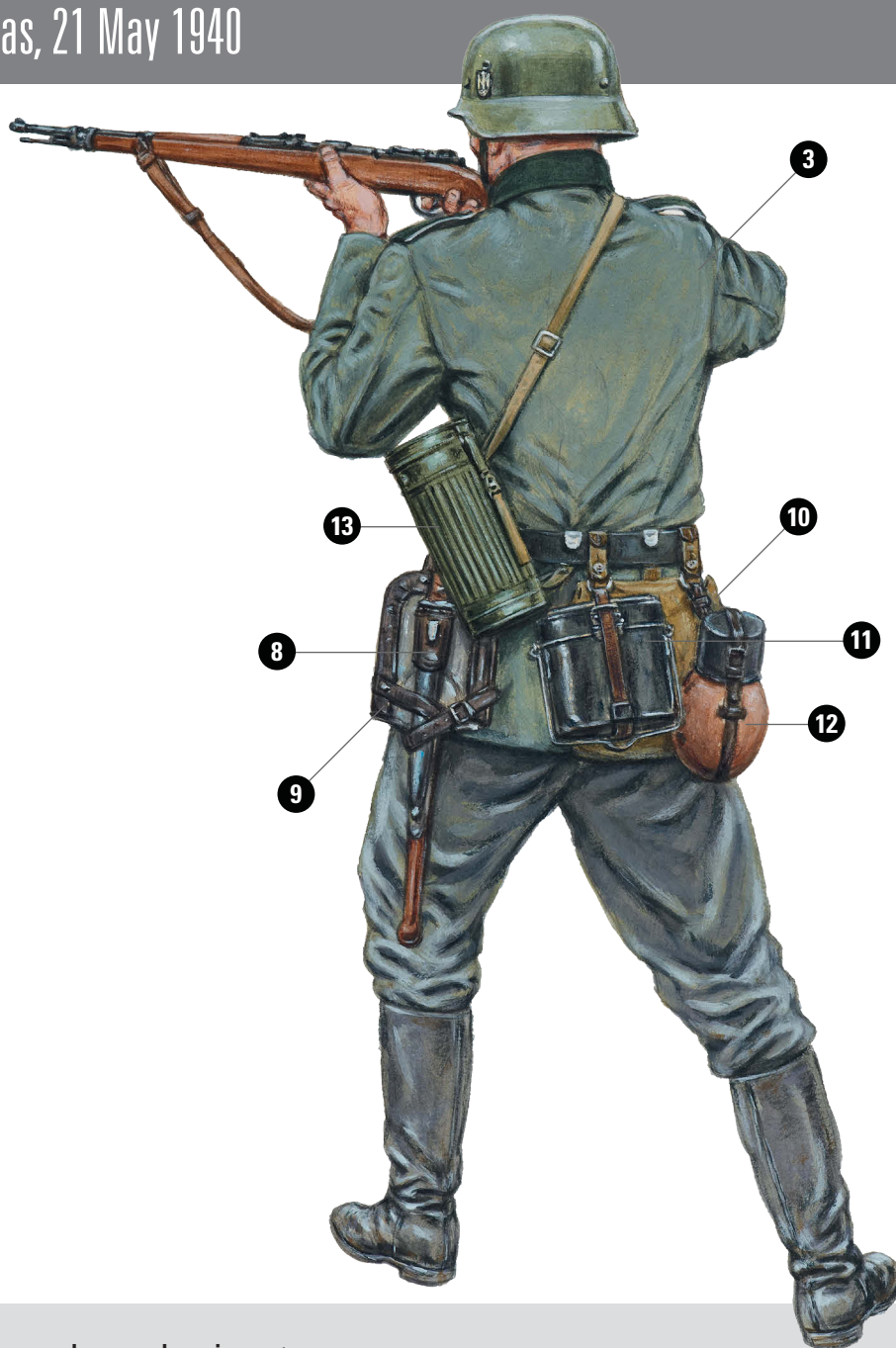
OPPOSITE British POWs in Calais are marched away in column. Rfmn Brian Asquith told how 'we were treated in a civilised way by these front line troops who offered medical treatment to anyone needing it' (quoted in Buck 2013: 15:32). Davies-Scourfield wrote of his captor: 'I shall never forget his kindness and humanity' (Davies-Scourfield 2004: 50). (Bundesarchiv Bild 183-L05174 Foto: Hörster)

BELOW Each 2nd KRRC section was transported in the 15-cwt Morris as shown here. In 1937, 6th DLI, belonging to 50th Division – a TA formation comprising 151st Infantry Brigade (6th, 8th and 9th DLI) and 150th Infantry Brigade – commenced training in truck loading following conversion to a motor division. In September 1939, new recruits were processed at Brancepeth Castle ITC. Conditions were basic and many were billeted in welfare halls in mining villages. Drill, weapons training, route marches, trench digging and strenuous physical training commenced. In October 1939, 6th DLI bought 20 cars to teach their truck drivers, but 2/Lt Mike Lockhart, the Motor Transport Officer, reported 'our regular 15 cwt vehicles and 3 ton Bedford lorries' soon arrived (quoted in Moses 1995: 120). On 4 December, a Humber car, nine 8-cwt trucks, an office truck and 12 30-cwt trucks followed. By early 1940, movement by truck, followed by disembarkation to assault a defended enemy position and then re-embarkation, was the usual exercise. The battalion was not marching fit, but as a motorized formation was not expected to march long distances. (© IWM H 79)



This soldier is in his early 20s and since the start of the offensive has been consistently on the move, but has had the benefit of motorized transport. He has fought a major action to cross the River Meuse and has been pursuing a retreating enemy both day and night. It is early afternoon and his unit has been taken by surprise by the British counter-attack. He is looking rather anxious because he has seen British tanks going around his position. He is taking aim at some British soldiers advancing into the village in which he is taking shelter.

Arras, 21 May 1940



Weapons, dress and equipment

The weapon is the early-version Mauser Kar 98k (1), introduced in 1935, which was a bolt-action rifle with an internal magazine that took five rounds, and a M24 Stielhandgranate (2) is carried in the belt. Uniform consisted of the field-grey (*feldgrau*) M36 wool tunic (*Feldbluse*; 3) with dark-green collar and shoulder straps, trousers (*Feldhosen*; 4) dyed slate grey, and high boots (5). The tunic was shorter than the earlier Reichswehr model, making for a better fit in a vehicle, and had four hooks that attached a belt.

The M35 helmet (*Stahlhelm*; 6) could be of various hues, ranging from very dark green to olive green and slate grey. Ammunition

pouches (7) with three pockets each holding two five-round clips (making 30 rounds per pouch), a bayonet (*Seitengewehr*; 8) and an entrenching tool (*Schanzzeug*; 9) in the same housing, and a bread bag (*Brotbeutel*; 10) were all attached to the belt. Instead of an assault pack (*Sturmgepäck*) worn on the back using an 'A' frame to carry additional equipment, this soldier has his cooking pot (11) and water bottle (12) attached to D-rings on the bread bag. The gas-mask container (*Tragebusche*; 13), worn over the shoulder on a green webbed strap, often contained personal items and extra ammunition. Altogether, this load weighed about 40–45lb.

WEAPONRY, TRAINING AND TACTICS

German

By 1918, *Stosstruppen* tactics, whereby a manoeuvre group specializing in close combat sought to turn a flank of an enemy position pinned down by a fire group equipped with machine guns, had replaced linear firing. By the early 1930s, *Einheitsgruppen* (all-purpose squads), each consisting of a five-man light machine-gun team and a seven-man rifle assault team, could implement these tactics. Tactics were based around achieving surprise and having a *Schwerpunkt* – a place (determined by reconnaissance) where a penetration of the enemy defences was most likely; once this was found, the formation commander there would be told of the importance of the battle he was fighting and all other units would support him.

The MG 34 machine gun could be fired without a mount, on a bipod, or mounted on a tripod as a heavy machine gun. Ammunition was typically provided in 50-round belts, which could be connected together to form 250-round belts to fit an ammunition box, or 50-round drums. With bipod the weapon weighed 12kg (26.5lb). *Schützen-Gruppen* (squads) used the MG 34 mounted on a bipod, *Schützen-Züge* (platoons) had a 5cm mortar available, and *Schützen-Kompanien* (companies) MG 34s on tripods. Further firepower was provided to the *Schützen-Bataillon* by the anti-tank guns and infantry guns of the *schwere Kompanie* (heavy weapons company), which was referred to as the commander's *Schwerpunkt Waffen* (main effort weapons); its unit integrity was preserved because support weapons were provided to all *Schützen* formation sizes, and its commander was trained to assess the best time to open fire to achieve maximum effectiveness. Divisional artillery weapons – 10.5cm and 15cm guns – were the *Schwerpunkt Waffen* of the division. (Bundesarchiv Bild 146-1972-072-25 Foto: o. Ang)





According to Major Siegfried Knappe – a *Leutnant der Artillerie* in May 1940 who would be operations officer of a *Panzerkorps* in Berlin by 1945 – because doctrine required commanders to develop *Verantwortungsfreudigkeit* (an enjoyment of responsibility), officer cadets – already fully trained soldiers – ‘learned everything an infantry battalion commander had to know in any kind of pre-combat or combat situation’ (quoted in French 2001: 58). Leaders were trained to act quickly and use initiative; during class-based exercises officers were given only a few minutes to form a solution to a tactical problem and a British War Office report in 1939 told how German cadets believed ‘it was better to do something which might turn out to be wrong than to take no decision and remain inactive’ (quoted in French 2001: 20). Offensive action was prioritized, including in the defence. Another War Office report in June 1944, describing small-unit infantry tactics, told how groups of 10–20 men ‘well armed with light machine guns and machine pistols’ would ‘counter-attack by fire and movement. They keep up a heavy fire while small details, even individuals, alternately push forward. The Germans almost always attack your flank. They seldom close with the bayonet, but try to drive you out by fire’ (quoted in Gudmundsson & English 1994: 115).

For tank commanders target priorities were anti-tank weapons, enemy artillery and infantry, in that order. Because of the shortage of gun shells (HE and smoke), medium tanks, according to a training directive for *Panzer-Kompanien* dated 1 March 1939, should use their main gun ‘only when machine guns are inadequate for the task’; if the target could not be pinpointed, ‘a few smoke shells can be used to blind the opponent so that he can be attacked and destroyed’ by the light companies (quoted in Jentz 1996: 83). If ambushed by anti-tank weapons tanks used cover and changed ‘speed and direction. If this is not possible, the Panzers while firing should charge the anti-tank guns at high speed’ (quoted in Jentz 1996: 78). Other tanks would attempt to manoeuvre around the flank and infantry guns would subdue the enemy anti-tank weapons.

In November 1940, Generaloberst Hermann Hoth, commander of XV. Armeekorps (mot.) and Rommel’s superior, summed up the German attitude to appreciating different arms of service: ‘success or failure of a particular troop type is not decisive; above all, the significance of a success of arms reveals itself with relationship to the overall operation of the army’ (quoted in Stolfi 1991: 39). Training directives described all-arms co-operation on the battlefield as indispensable; the 1 March 1939 directive specified ‘where and when support from other arms (infantry, artillery, combat engineers, anti-tank guns, aircraft) is planned (during approach, during breakthrough, after

Each German platoon was provisionally allocated a Panzerbüchse (PzB) 38 or 39. The weapon was a single-shot, manually loaded, bolt-action anti-tank rifle that fired a 7.9mm-calibre bullet. The PzB 38 weighed 15.9kg (35lb) and the PzB 39 – shown here – 12.6kg (28lb). Each round was manually loaded by the gunner. When a round was fired, the breech block ejected the casing and was held in position for another cartridge to be inserted. The gunner used a lever in the grip to release the breech mechanism forward to push the cartridge into the barrel. This mechanism was prone to breakdown in the field. The PzB 39 was 161.5cm (5ft 4in) long, but had a folding stock for transportation that reduced length to 129cm (4ft 3in). The bullet could penetrate 30mm of armour at 100m (109yd). In May 1940 there were not enough to equip all divisions and allocation varied. (Neil Grant)

As well as divisional artillery, *Schützen* regiments had their 7.5cm field guns. Six out of ten *Panzer-Divisionen* also had a company of six 15cm infantry guns mounted on a PzKpfw I chassis (15cm sIG 33 auf PzKpfw I), depicted here in 1942. Although top-heavy and poorly protected, they were effective at reducing enemy strong-points. 7. and 10. Panzer-Divisionen had available *Infanteriegeschütz-Kompanien (mot. S)* (Self-propelled Heavy Infantry Gun Companies) 705 and 706, respectively. (Bundesarchiv Bild 101I-216-0406-37 Foto: Gellert)



breakthrough, on the flanks or in the attack zone)' (quoted in Jentz 1996: 77). Furthermore, when tanks supported infantry, Panzers would 'destroy enemy weapons (mainly machine gun nests and heavy infantry weapons) that directly hinder the infantry attack', and assist infantry 'in crossing open terrain and advancing against domineering heights, village, or wood lines by ... advancing and pinning down the enemy' (quoted in Jentz 1996: 78).

Co-operation between different arms was firmly embedded in doctrine, but in many cases would be found wanting in practice. Some German commanders were still keen on separating the tank and *Schützen* brigades' axis of advance. There were exceptions, when tank companies were attached to *Schützen* battalions and *Schützen* companies (especially those mounted in APCs) accompanied the tank brigade. If this did not happen, in urban areas especially, tanks performed badly without infantry support; on 9 September 1939, for example, 57 were lost attempting to seize Warsaw. In May 1940, against an enemy better equipped with tanks and anti-tank guns than the Poles, *Schützen* carried in trucks needed protection, but during the break-out from the River Meuse/Maas tanks would rush ahead and leave their truck-borne *Schützen* behind.

In the interwar years, potential regular officers served 18 months as a soldier and completed a course for *Unteroffiziere* at the *Infanterieschule* in Dresden before attending officer training at a *Kriegsschule*. As well as those with a higher education, a proportion of enlisted men were also taken. Company commanders in 1940 were likely to have joined in the Nazi era, when military service was compulsory; initially, conscripts like Siegfried Knappe usually joined the *Reichsarbeitsdienst* (Labour Service) for six months, where military discipline and drill were taught. In October 1936, he joined an artillery regiment and completed six weeks of basic infantry training (infantry recruits did 12 months) before three months of basic artillery training, during which he was invited to be an officer candidate. He attended Potsdam *Kriegsschule* for nine months in November 1937 (by then there were four such schools, training 1,000 cadets each); his group commander was Oberstleutnant Rommel and his time was 'quite pleasant' (quoted in Mitcham 2008: 19). He returned to his regiment and after specialist training was commissioned on 1 September 1938. Higher-level tactics were taught at the *Kriegsakademie* and

a proportion of the brightest, like Knappe, went on to join the General Staff. Others, such as Alexander Stahlberg, joined in 1935 to fulfil his year's military service; he arrived at newly built barracks belonging to 6. Reiter-Regiment in Schwedt, where 'Sixty to seventy young men had been allocated to each of the six squadrons' (Stahlberg 1972: 63). In July 1938, having returned to civilian life, he received notification of call up to PzAbAbt 2, belonging to 2. Infanterie-Division (mot.), and on 1 September reported as a 'Sergeant of the reserve and candidate for the Reserve of Officers' (Stahlberg 1972: 89). After the exercise he returned home and in December received a letter promoting him to 'Lieutenant on the Reserve' (Stahlberg 1972: 96), without any formal officer training, but with experience in the ranks.

British

In the interwar period, Britain concluded mobility and logistics were more important than firepower. Accurate, light weapons that would not expend excessive amounts of ammunition, as well as expert shots that would hit their target, were prized; sustained-fire weapons that could create collateral damage required a lot of ammunition, and were largely ignored. The standard weapon was the 1903 Lee-Enfield rifle, a bolt-action gun that could fire 15 rounds per minute. Submachine guns, considered 'gangster guns', were overlooked, despite experiences in World War I that made clear the utility of suppressing fire. Neither was a multipurpose machine gun developed; in 1935, to Milne's consternation, the light, accurate but magazine-fed Bren gun was chosen. 2in mortars, weighing 10.5lb, were issued to platoons, but mostly only had smoke rounds to provide counter-attacking formations with cover. The 3in mortar, introduced in 1936, was so heavy that only a couple were issued to each infantry battalion (the German battalion had six 8.1cm mortars). In 1934, while each infantry brigade had an attached 2-pdr anti-tank gun battery whose shell could penetrate 40mm of armour at 1,000yd (the German 3.7cm gun could penetrate 27mm at this range), infantry battalions relied on the Boys anti-tank rifle. Indirect fire was provided at divisional level by the 25-pdr gun Mk I brought into service in 1937, which was actually an adapted 18-pdr used in World War I, and could only fire up to 11,000yd.

Tanks, because of the infantry's lack of organic medium machine guns and infantry guns, were supposed to be an essential component of an infantry attack. From 1920 to 1935, speed rather than protection was favoured and, like armoured cars, they were built for rapid movement around the battlefield. By 1935, more powerful anti-tank guns prompted the development of well-protected infantry tanks and closer co-operation with infantry was envisaged, but overall tank design neglected firepower. In 1938 training pamphlets expected artillery and infantry to neutralize anti-tank guns and occupy

Here, a .303in-calibre Short Magazine Lee-Enfield No. 1 Mk III rifle, a variant introduced during World War I and renamed in 1926, is shown. In 1918 British infantry tactics established the section – based around the Lewis machine gun and a group of riflemen – as an independent manoeuvre group. However, in 1936, sections were reorganized into smaller, more mobile, seven-man units based around a Bren gun and the platoon replaced the section as the smallest unit capable of fire and manoeuvre. More beneficially, Liddell Hart developed the 'expanding torrent' method of attack to widen a weak point and gave formations either a fix or strike role, but basic training establishments concentrated on parade-ground drills to imbue discipline and neglected tactical training (104 out of 420 training hours were devoted to drill); Pte Len Waller, who joined The Grenadier Guards in 1940, described being constantly 'marched and yelled at up and down the barrack square' (quoted in French 2001: 127). (NRA Museums, nramuseums.com)





In 1925, Maj (later Lt-Gen) Giffard Martel had designed a tankette that by 1940 developed into the Bren gun carrier; these 'resembled tiny little tanks without roof or turret and [were] only lightly armoured' (Davies-Scourfield 2004: 1). Liddell Hart envisaged whole battalions equipped with them; instead, many were used to move weapons and ammunition. Infantry battalions had a platoon transported in them, as did motor companies, and many carried a Boys anti-tank rifle as well as a Bren gun. (Cody Images)

ground, respectively, while infantry tanks would destroy enemy machine guns. The 2-pdr gun firing armour-piercing shells was standard; its high rate of fire made target acquisition easier, but to deal with fortified locations larger-calibre guns capable of firing high-explosive rounds were required. Furthermore, although training manoeuvres began to include infantry co-operation with tanks, opportunities to train regularly were rare because tanks were not within the divisional organization.

Officers' basic training was found wanting. In May 1942 Lt-Gen (later Gen) Sir Ronald Adam, DCIGS 1938–39 and GOC III Corps in 1940, asserted that Officer Cadet Training Units (OCTUs) concentrated 'on training the cadet to be the perfect private soldier' (quoted in French 2001: 75) rather than making them leaders. Deverell refused to establish a junior officer's tactical school to teach a common tactical understanding, saying that 'Schools are to produce instructors, not to teach the elements' (quoted in French 2001: 60). Although he wanted battalion commanders to set their own standards, not all were as conscientious as others: some developed training programmes to encourage initiative, but many simply prioritized physical fitness, weapons training and sports, to please senior officers. TA battalions were worse off because there were only four weekend camps and one summer camp per year and turnover of personnel was high. Regular officers had to pass exams for promotion, which included tactics, but only in March 1939 was a ten-week course for captains belatedly introduced; TA officers found exams challenging because they were not taught the job of their superior. A three-month course at Senior Officer's School prepared majors for unit command, but battlefield temperament was not assessed and the course was not mandatory for TA officers. The teaching of operational techniques was similarly wanting; in the 1920s, Maj-Gen (later FM) William Ironside – the Commandant of Staff College Camberley (1922–26) and later CIGS (1939–40) – wanted this instructed at a new War College, but Milne vetoed him. In April 1939, to study the role and techniques of a motor battalion, 2nd KRRC held an 'Officers Week', but generally combined-arms field exercises were restricted to a five-week period at the end of the training cycle, during which umpires,



to the detriment of small-unit tactical development, often called temporary halts when the sides were in close proximity. In December 1936, Deverell admitted the system had failed unit commanders; he thought most 'have had no tactical experience', which meant they 'are not able to train their units' (quoted in French 2001: 63). Rommel, in early 1940 appointed to command 7. Panzer-Division, was similarly critical; he surmised 'higher ranking British officers thought more in terms of strategy than tactics' (quoted in French 2001: 164).

Rank-and-file training varied once the recruit reached his battalion. TA units again were worse off – shooting practice was severely curtailed and consisted of firing down lanes at moving targets of different shape and size. By December 1939, after mobilization and a move south to Chipping Norton on 21 October, 6th Battalion, The Durham Light Infantry (6th DLI) used proper firing ranges at Castle Bromwich. Even so – according to Maj Peter Jeffreys, 6th DLI's adjutant from 1937 – the men were accommodated in 'the upper storeys of barns, granaries and that sort of thing' (quoted in Moses 1995: 120); Pte Alf Bailey described how 'Most of us had scabies' through sharing bought 'hot water from the cookhouse' (quoted in Moses 1995: 121). Platoon and company exercises followed and – on 29 January – transportation to Cherbourg, but because of bad weather the journey to Amiens, where training was expected to continue, took nearly a month. A staff report in May 1940 highlighted 'a general complaint that training up to the time of active operations had been lacking in realism and that the written word of reports on German methods was insufficient to prepare troops for actual operations' (quoted in French 2001: 179). Jeffreys thought weapons-handling was good, but spoke of a lack of grenades and was angry when time was wasted digging an anti-tank trench.

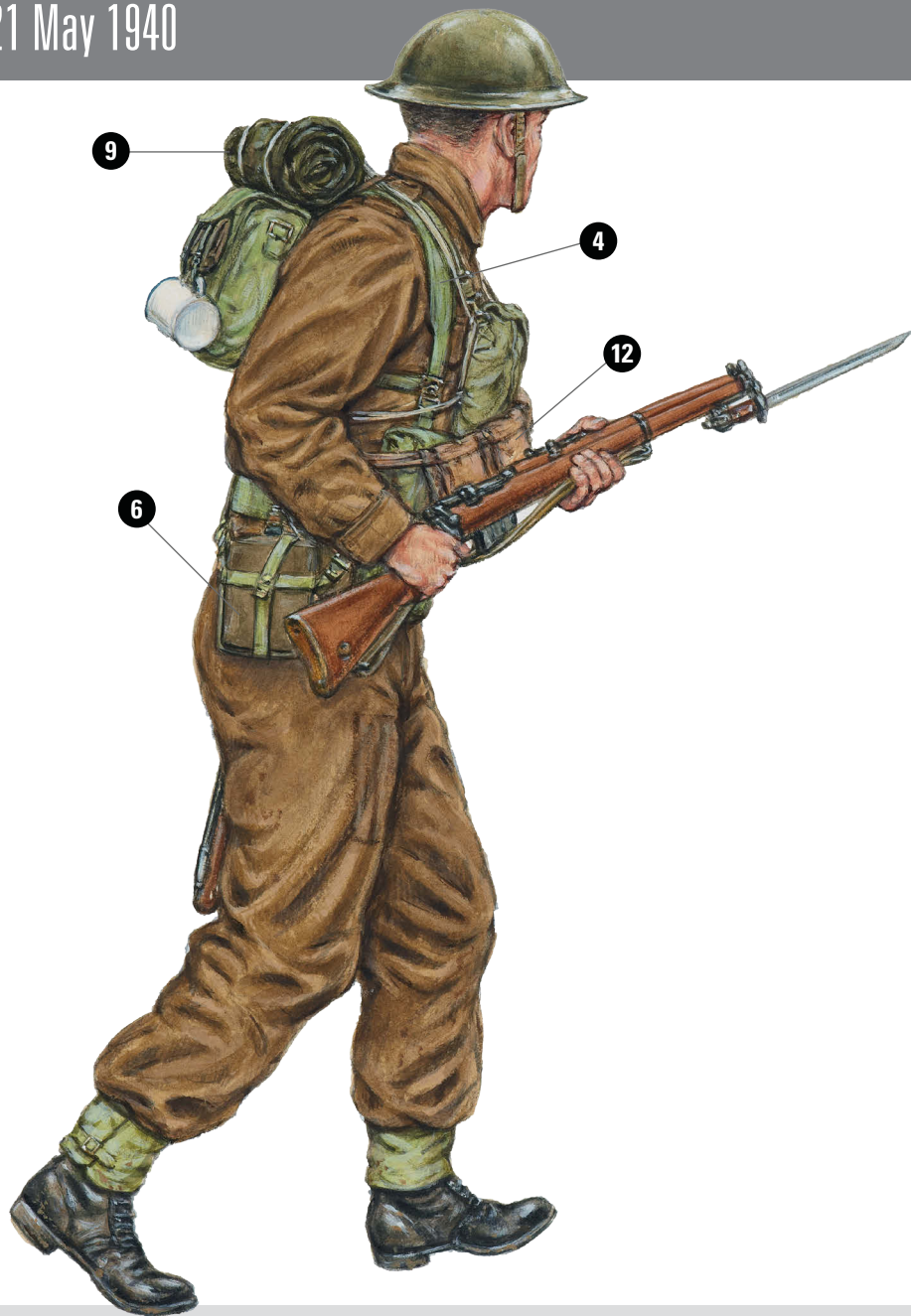
Meanwhile, within 2–6 weeks of its formation in February 1940, 6th Battalion, The King's Own Royal Regiment (6th King's Own), a pioneer battalion, was collecting brand-new transport and equipment at King's Lynn. A document detailing their role optimistically included all infantry tactical operations: deliberate attack, counter-attack, river crossing, night withdrawal, and many other manoeuvres. Skilled engineering work and a capability of acting as 'a storm pioneer battalion' were also expected; however, the majority of personnel had not fired a rifle, let alone an anti-tank rifle. On 25 April, the battalion arrived in Le Havre and worked on completing defences along the Belgian border.

A Mk I Bren gun. 2/Lt Davies-Scourfield, 2nd KRRC platoon commander, thought the Bren, weighing 22.5lb, 'a wonderful weapon, very few stoppages' (quoted in Buck 2013 1:15). The soldiers of 30th Infantry Brigade – 2nd KRRC's parent formation – were, according to Prime Minister Winston Churchill in his history of World War II published in 1950, among 'the splendid trained troops of which we have so few' (quoted in Neave 1972: 77). As early as 1927, 2nd KRRC formed the mobile infantry component of the EMF; however, with a move to Belfast in 1932, the battalion reverted to conventional infantry. A return to Aldershot in late 1935 was quickly followed by deployment on counter-insurgency operations in Palestine and only in December 1937 did the battalion, back in Britain, assume the role of a motor battalion within the Mobile Division. (Neil Grant)



This D Company soldier in his early 20s has been marching a good distance over the last few days. He advanced into Belgium to the Escaut Canal and then marched back to take up positions north of Arras. On 20 May he began to march to Vimy Ridge because no trucks could be found. It is now mid-afternoon on a mild day and he has already marched ten miles since moving down from the ridge at midday. He is advancing, rather hesitantly, through a village, carrying his weapon in front of him, slightly raised, in anticipation of engaging enemy soldiers.

Arras, 21 May 1940



Weapons, dress and equipment

This man is armed with a World War I-vintage No. 1 Mk 3 Short Magazine Lee-Enfield (SMLE) rifle (1), capable of holding ten rounds in the magazine. Ammunition could be loaded individually or stripped in from a five-round charger. Field Service Dress consisted of a short blouse jacket (2) and baggy trousers (3) that allowed freedom of movement. The material – khaki wool serge – was heavy, warm and long-lasting. 1937-pattern webbing (4) was made of khaki-dyed cotton with stamped-brass fittings and had interchangeable parts. The webbing was coated with pale-green blanco for protection from the elements and camouflage, but the colour differed according to

how much was applied and fading. Standard components included a belt, cross-straps, cartridge pouches (5), water bottle and carrier (6), and small haversack (7). A respirator sack (8) was worn on the front, which hindered diving for cover; a gas cape (9) was rolled up and placed on top of the haversack, and a 1907-pattern bayonet in its scabbard (10) and entrenching tool (11) were attached to the webbing belt. Infantrymen often carried one or more khaki-cloth rifle-ammunition bandoliers (12) slung over the shoulder; each had five pockets holding two five-round charger clips per pocket. All told, the load weighed 40–45lb.

COMMAND, CONTROL AND COMMUNICATIONS

German

A British officer observing German battalion manoeuvres in May 1939 thought junior officers lacked imagination because all offered the same solution to a tactical problem. 2/Lt David Hunt was told during officer training in late 1939 that their German equivalents ‘worked out schemes of the utmost ingenuity’ and ‘were quite unable to compromise’ (quoted in French 2001: 46); however, the conclusion he reached as an intelligence officer was that German leaders showed ‘enormous initiative’ and ‘brilliance at improvisation’ (quoted in French 2001: 47).

Auftragstaktik (mission-oriented tactics) encouraged the subordination of various units within temporary *Kampfgruppen*. Higher formations such as divisions were seen as administrative units; in 1939 and 1940 brigades took charge of different arms – artillery, combat engineers and anti-tank units. Because regimental and brigade staffs, on forming in 1935, were trained to control different troop types, by 1940 battle procedures were firmly established. The Polish campaign proved that commanders could attach or detach elements from and to other arms, according to mission, terrain and enemy forces encountered. Officers were confident that squad leaders could implement tactical solutions and expected private soldiers to exhibit initiative and leadership qualities. A training directive dated 1 March 1939 confirmed how the lowest-ranking NCO needed to know ‘about the situation and tasks of our infantry, especially the forward infantry line, previously discovered locations of enemy weapons, and the nature of the terrain’ (quoted in Jentz 1996: 77).

Unit attack orders were brief and included only essential points, according to a directive dated 1 March 1939, including the ‘organization and assignment of each element, [and] coordination with other arms’ (quoted in Jentz 1996: 77). Rommel relied on his operations officer, Oberstleutnant Julius von Bernuth, here standing beside him, to give direction to 7. Panzer-Division’s *Kampfgruppen*. Senior officers commanded from the front and risked injury or death. On 21 May 1940, Rommel’s assistant, Leutnant Most, was killed by machine-gun fire from a British tank outside Arras; after the campaign, Rommel’s operations officer might have stressed the importance of providing armoured vehicles for the divisional commander, but on 24 June 1941, Generalleutnant (later Generalfeldmarschall) Walter Model, commander of 3. Panzer-Division, nearly perished when an armoured car he had requisitioned and recently disembarked from was destroyed by artillery fire. (Bundesarchiv Bild 101I-124-0242-24 Foto: Gutjahr)



The German command system was effective because officers accepted the battlefield as an inherently uncontrollable environment and resolved operational uncertainty by exhibiting a willingness to act. Mistakes were inevitable, but could be rectified by further action. The operations officer and his small staff determined the composition of *Kampfgruppen* for specific missions and re-formed them as and when the situation changed. Communication between divisional commander and subordinate unit commanders was brief and to the point. The divisional commander set the general thrust line and the tempo of operations was maintained day and night; there was no surfeit of staff officers debating options. Radios carried in command vehicles linked the commander to his subordinate units. Within the battalion the *Nachrichten-Zug* was equipped with four *Feldfu b* radios; each could be carried in a backpack by one soldier and operated by another, with an effective range of 1,200m (1,300yd). Such radios were issued to companies as required. The regiment also had a *Nachrichten-Zug* for communication between battalions and with regimental HQ. Telephone lines could also be laid if static positions were occupied. The limited range and reliability of backpack radios was such an issue that couriers mounted on motorcycles were frequently used to communicate orders, if commanders could not attend an orders group. German company-sized formations, unlike their British counterparts (except the motor battalions), had access to radios, and in theory their battlefield doctrine taught them how to use them sparingly.

British

The art of generalship, the 1932 Kirke Committee concluded, was ‘continuous control from above’ (quoted in French 2001: 32). Because generals, thinking subordinates lacked tactical judgement, would not trust them to use their own initiative, they wanted a master plan of written orders and battle drills for most activities. All-arms co-operation doctrine, in particular, specified detailed, meticulous planning. Battle drills for most activities discouraged junior officers and NCOs from thinking for themselves. Field Service Regulations (1935) allowed orders to be disregarded only if the situation altered radically; to modify the plan the tactical situation needed to be reported and confirmation of changes received.

An infantry division had only 75 wireless sets, and many could only transmit Morse code. Infantry battalions had radio connection with brigade, but companies relied on runners or dispatch riders to communicate with battalion HQ (except in the motor battalion, where company HQs had a wireless and each carrier platoon an additional couple). Tanks had radios, however, according to 2/Lt Hugo Ironside, 3rd RTR’s intelligence officer, the No. 13 set ‘never stayed on net, it was highly unreliable. It just wandered off net most of the time’, which meant the operator was continuously ‘trying to keep it on the net’ (quoted in Buck 2013: 3:4) – more than just an inconvenience as the wireless operator in many tanks was also the main-gun loader. Brig (later Maj-Gen) Percy Hobart, appointed Inspector of the Royal Tank Corps in 1934, actually favoured all-tank formations because communication with infantry and artillery was so difficult.



British officers consult maps in the Somme area during May 1940. Rommel thought the British system gave 'little latitude to the junior commander' and was 'unwieldy and rigidly methodical' (quoted in Gudmundsson & English 1994: 105). Many British officers realized the system was inflexible, but most assumed they would somehow muddle through. Commanding officers, lacking a chief of staff, were often at a static HQ, despite Field Service Regulations (1935) recommending forward HQs for the tactical control of the battle. (© IWM F 4578)

In the pre-war Army, officers were paternalistic towards their men and morale benefited; according to Maj-Gen R.J.T. Hildyard, a TA divisional commander in 1934, 'a competent and tactful officer invariably commands the unquestioning obedience and loyalty of his men. It is a discipline of camaraderie, which is the opposite of rigid discipline' (quoted in French 2001: 129). In 1940 Lt-Col T.H. Miller, such an officer, commanded 6th DLI. Because infantrymen often displayed a lack of aggression, officers had to drive them on. However, a high proportion of officers encouraged soldiers' dependency on them and Col J. Prendergast, a mountain-warfare specialist in India, thought 'the rank and file never thought for themselves and all including warrant officers and NCOs lacked initiative' (quoted in French 2001: 57). Capt Stephen Monico, adjutant of 1st Battalion, The Queen's Victoria Rifles (1st QVR), explained why officers and NCOs of a motor battalion were different: 'you were thrown out as a screen and every company commander, platoon commander and NCO had to really think and act for themselves if necessary because we were very often spread out enormously in that type of role' (quoted in Buck 2013: 1:4).

On 23 May, 42-year-old Brig Claude Nicholson arrived at Calais. He had been the colonel of the 16th/5th Queen's Lancers, a cavalry regiment he had joined during World War I, and was promoted to command 30th Infantry Brigade on 20 April 1940; since 11 May the brigade had been constructing invasion defences in East Anglia, but with organic transport could fulfil a short-notice requirement to deploy. Rfmn Thomas Sandford of 2nd KRRC described him as 'sensitive, modest, and very intelligent'; an officer who 'was apparently destined for higher command' (quoted in Buck 2013: 3:11).

Arras

21 May 1940

BACKGROUND TO BATTLE

On 10 May, seven *Panzer-Divisionen* from Heeresgruppe A crossed into southern Belgium to break through the Allied line on the Meuse/Maas. Rommel's 7. Panzer-Division along with Generalleutnant Max von Hartlieb-Walsporn's 5. Panzer-Division comprised XXXIX. Armeekorps (mot.), its most northerly Panzer formation. Rommel's mission was to help guard the flank of Guderian's XIX. Armeekorps (mot.) as it moved out of the Sedan bridgehead towards the Channel; on Rommel's northern flank stood Generaloberst Erich Hoepner's XVI. Armeekorps (mot.) (3. and 4. Panzer-Divisionen) from Heeresgruppe B, an army group primarily consisting of infantry divisions advancing into central Belgium.

Once the German invasion started, the Allies moved their best divisions, including the BEF, forward to support the Belgian Army. The BEF was not equipped or trained to win a manoeuvre battle and, despite lacking enough troops and anti-tank guns to make a defensive position viable, adopted positions in depth behind the River Dyle. The German attack further south exposed supply depots behind the River Somme (60 days of petrol and 45 days of ammunition; those north of the Somme held only a week's worth) and by 18 May 6th DLI marched back 35 miles to the River Escaut/Scheldt. The following day another 20 miles were covered on foot and that night trucks took them to La Bassée, 15 miles north of Arras.

British troops take a rest. The men of 6th DLI were tired out before the battle started. Expecting to defend La Bassée Canal, at 0515hrs on 20 May the battalion was instead ordered to Vimy Ridge by truck; however, no transport could be found. D Company reached the ridge by marching by 1200hrs on 20 May. The rest moved off in trucks at 0300hrs on 21 May and reached the ridge at 0330hrs. (Cody Images)



Meanwhile, Rommel's I./SR 6 under Major von Paris, having crossed the Meuse/Maas, seized bridges across the Escaut/Scheldt late on 18 May. Other bridgeheads were reinforced the following day prior to an advance towards Arras at 0140hrs on 20 May. Moving off at 0500hrs on 20 May, by 0650hrs PzRgt 25 advanced 18 miles along the good road network and left the *Schützen* behind. At this time 7. Panzer-Division was the furthest forward of all Panzer divisions; 5. Panzer-Division was 19 miles back. The following day, instead of pausing, Rommel recommenced his north-westerly advance, bypassing Arras to the west.

Maj-Gen Sir Harold Franklyn, GOC 5th Division, was tasked with the defence of Arras. On 19 May, Gen Lord Gort, C-in-C BEF, told him to gain 'as much "elbow room" as possible south of the town' and Franklyn was left with 'the impression that I was only likely to encounter weak German detachments' (quoted in Barnett 1986: 65). Franklyn expected a simultaneous

By May 1940 most Panzer divisions had two *Schützen-Regimenter* supporting two *Panzer-Regimenter*, but there were anomalies and the proportion of tank types varied. At the beginning of May 1940, 3. Panzer-Division's PzRgt 6 and PzRgt 7 had 246 PzKpfw I and II, but only 42 PzKpfw III and 26 PzKpfw IV. 10. Panzer-Division, created in March 1939, had PzRgt 8, comprising 44 PzKpfw I, 113 PzKpfw II, 58 PzKpfw III and 32 PzKpfw IV. The prevalence of small, light tanks is illustrated here. (Bundesarchiv Bild 101I-382-0248-33A Foto: Böcker)





A firing range at Étaples, shown here, permitted practice with the Boys ATR by some 6th DLI recruits; according to Pte George Iceton, 'we prepared these cardboard tanks on wheels and I would pull them between the sand dunes ... they had to fire at the tank with this anti-tank rifle' (quoted in Moses 1995: 126). After Dunkirk troops were told to engage at under 30yd or fire at tank tracks. (© IWM F 2441)

advance by a couple of French divisions from the south towards Cambrai and at 0600hrs on 21 May told Maj-Gen Giffard Martel, GOC 50th Division, to clear 'an area ten miles deep and four miles wide' (quoted in Barnett 1986: 66). Martel originally intended to use 25th Brigade (recently added to 50th Division), but transport failed to turn up. Instead, Brig J.H. Churchill's 151st Infantry Brigade was called upon to support Brig D.H. Pratt's 1st Army Tank Brigade, while 150th Infantry Brigade took up defensive positions in Arras and along the River Scarpe. Martel was under the impression that enemy tanks south of Arras were 'in numbers not expected to be great' (quoted in Barnett 1986: 65). He organized 6th DLI, along with 4th RTR (commanded by Lt-Col J.G. Fitzmaurice), as his left prong; the other prong consisted of 8th DLI and 7th RTR. Some 70 tanks from the French 3e Division légère mécanique (3e DLM) deployed west of Arras. Martel agreed to cross the Arras–Doullens road start line at 1400hrs, but Pratt thought 1500hrs more realistic.

At 0945hrs, Brig Churchill gave verbal orders to battalion commanders. No tank officer was present and Lt-Col T.H. Miller, CO 6th DLI, was unsure which regiment was to support him; he met Fitzmaurice at 1245hrs but would not talk to him again. Miller did not know Rommel's 7. Panzer-Division was opposing him; no reconnaissance was possible, maps were scarce and tank radios – which had maintained radio silence because of security concerns – were prone to drift off net. 368th Battery, 92nd Field Regiment, RA (equipped with 25-pdr guns), 206th Battery, 52nd Anti-Tank Regiment, RA (equipped with 2-pdr guns), a platoon from 151st Brigade Anti-Tank Company, and a company of motorcyclists and platoon of scout cars from 4th Battalion, The Royal Northumberland Fusiliers (4th RNF), accompanied the battalion; their intended route was west of Arras through Wagnonlieu and Dainville and then through Achicourt and Beaurains. However, orders were delayed and Miller did not complete those for company commanders until 1055hrs. The battalion had a 10-mile march to the start line and the men left Vimy at 1100hrs. Miller, appointed column commander, allowed 4th RTR to motor ahead.

I./SR 6 and 6th DLI at Arras, 21 May 1940

MAP KEY

- 1 1200hrs:** 6th DLI approaches the River Scarpe.
- 2 1325hrs:** 6th DLI is shelled at Wagnonlieu by German artillery.
- 3 1400hrs:** 4th RTR reaches the start line along the Arras–Doullens road. This line is reached by 6th DLI at 1430hrs.
- 4 1530hrs:** 6th DLI reaches Achicourt. Meanwhile, in front of them, 4th RTR is successfully engaging SR 6.
- 5 1530hrs:** B Company, 6th DLI starts to clear Agny.
- 6 1600hrs:** C Company, 6th DLI takes up defensive positions around Beaurains, while D Company, 6th DLI occupies an orchard guarding the road south of the village, and A Company, 6th DLI is in reserve.
- 7 c.1630hrs:** 4th RTR, which has pushed on without infantry support, is fired on by 4. and 5./AR 78 from a rise called Telegraph Hill and also by 6./AR 78 located nearby; 20 British tanks are knocked out.
- 8 2030hrs:** Maj Jeffreys, second-in-command 6th DLI, receives the order from Lt-Col Miller, CO 6th DLI, to withdraw. Tanks of 5. Panzer-Division start to arrive and support what is left of SR 6.
- 9 Evening:** Covered by the right-hand Allied column north of Warlus, which wards off PzRgt 25, Miller moves back what is left of his fragmented battalion to Vimy Ridge during the night.

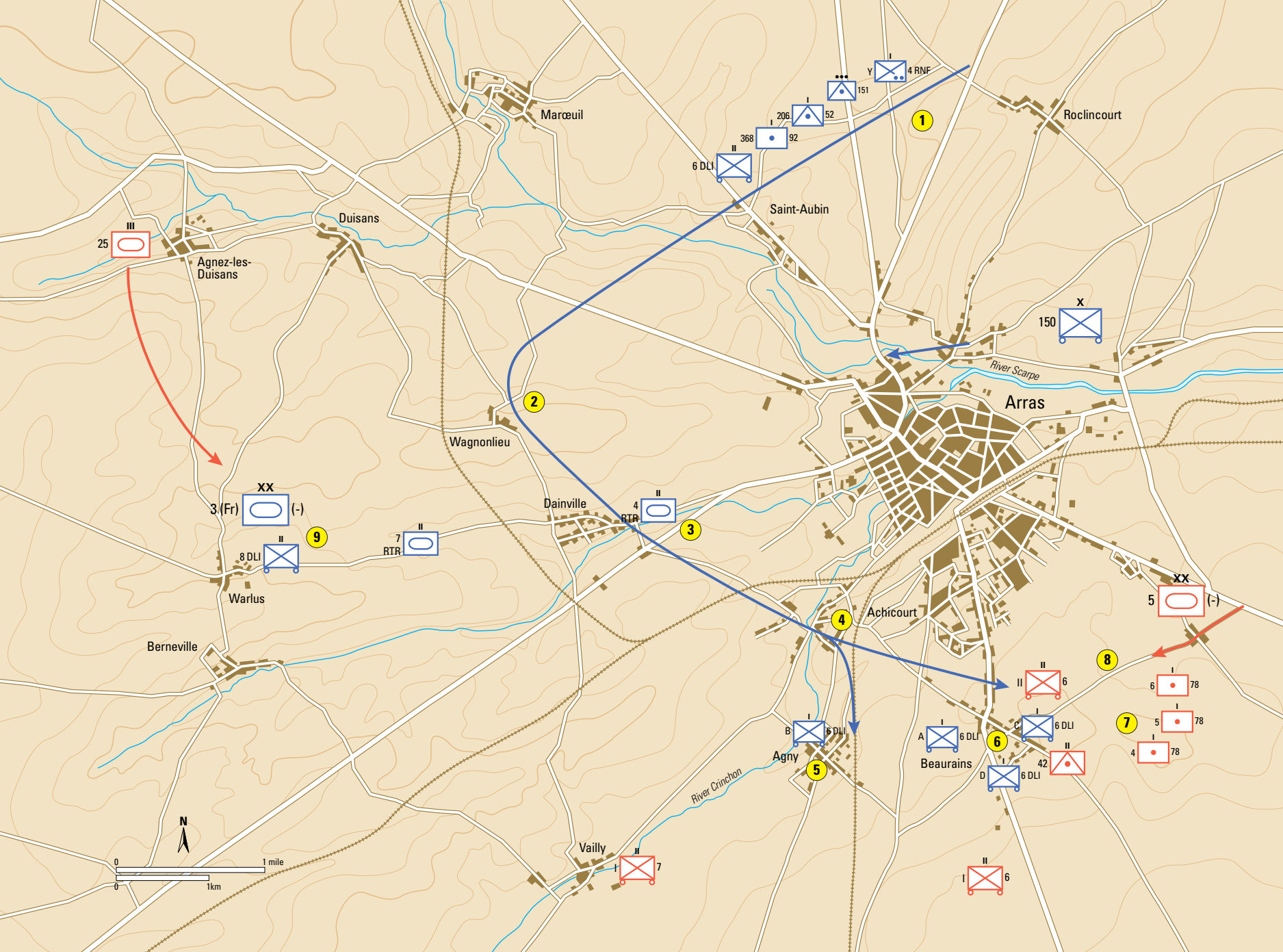
Battlefield environment

Arras is a large town on the River Scarpe. The British attack columns were due to move from Vimy Ridge, which overlooked the town from the north, around the town's western outskirts, and move south-east through villages to the south of the town, where they were expected to engage the enemy and clear an area. The area to the south of the town was intersected with many roads and railway embankments, which would confuse and hinder movement, especially for the tanks, whose commanders complained

about a lack of maps. There are also some rolling hills south of the town, which obstructed line of sight. 2/Lt Tom Craig of 4th RTR summed up the difficulties: he 'arrived at Petit Vimy in my Matilda exhausted and disorganised. I was given a map by my company commander and told to start up and follow him. The wireless was not working, there was no tie-up with the infantry and no clear orders' (quoted in Holmes 1997: 174).



Here, the windmill outside of Achicourt, a village located south of Arras, is prominently displayed. Arras is in the distance. During World War I, Arras was occupied by the Allies from 1914 and in April 1917 a major offensive was launched from around the town; the Entente Powers made territorial gains especially on the heights north of the city called Vimy Ridge by using the platoon as the basic tactical unit and utilizing counter-battery fire. The war destroyed 75 per cent of the city, much of which was rebuilt in the inter-war years. (Author's collection)



INTO COMBAT

At 1325hrs, near Wagnonlieu, 6th DLI experienced German shelling; according to Miller, his companies 'adopted artillery formation and deployed on each side of the road' and 'casualties were fortunately only slight' because the men 'kept their formation and advanced steadily' (quoted in Moses 1995: 126). Although no contact had been maintained with the tanks Miller 'could hear their two pounders and MG's rattling away' (quoted in Moses 1995: 132). Jeffreys, further forward than Miller, left Dainville, and observed 4th RTR tanks 'firing and there were some of them on fire ... and a lot of smashed up German vehicles'; he was informed later that German 'tanks had gone on past our right as if to round the flank and what the 4th Royal Tanks had run into was the soft infantry in vehicles, following the German tanks and, of course, they bashed into them' (quoted in Moses 1995: 133–34). 2/Lt Peter Vaux of 4th RTR described 'masses of half-tracks and lorries and motorcycles and anti-tank guns on tow. And everything worked as it should. The gunners all fired and the German lorries burst into flames' (quoted in Levine 2010: 92). He told how the Germans 'were just as surprised as us and we were right in amongst them ... and for the first quarter of an hour or so there was a glorious "free for all". We knocked out quite a lot of their lorries: there were Germans running all over the place' (quoted in Holmes 1997: 174).

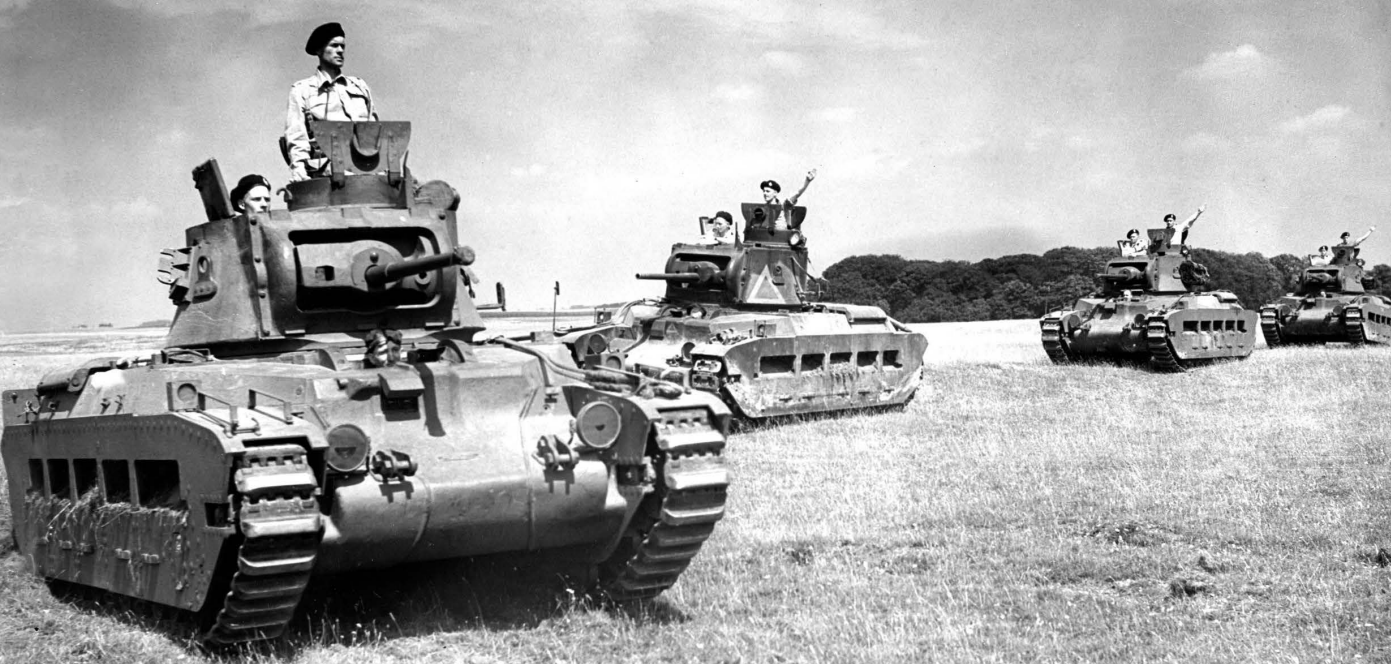
That day Rommel had wanted to wheel around Arras and move on Lille, and at 1530hrs his division was strung out in a column 6–7 miles long. He 'intended to accompany the tanks again myself', but decided to go back to encourage the infantry and when the British attack commenced was with SR 7 near Wailly, where he found an artillery battery 'firing rapid on enemy tanks advancing south of Arras' (Liddell Hart 1987: 30).

Despite 4th RTR's promising start, Pratt warned Martel: 'The infantry are miles behind. We are going forward against strong opposition ... We will be absolutely smashed and we must stop this mess, get things together and try again later' (quoted in Holmes 1997: 177). Jeffreys told how 'There was no equipment for communication between infantry and armour' (quoted in Barnett 1986: 67). 7th RTR took the wrong route and became entangled with 4th RTR at Dainville. Few radios were working and when Lt-Col Hector Heyland, commanding 7th RTR, was killed by machine-gun fire as he stood outside his tank organizing the attack, his battalion lost all cohesion.

Miller, who had worked with tanks in World War I and realized the importance of keeping the infantry up, found his companies engaged with

The A11 infantry tank (those pictured here in May 1940 belonged to 4th RTR) had a machine gun and had armour that was proof against anti-tank guns up to 40mm. By 21 May, after the move forward and back from the Dyle position, Pratt had lost 25 per cent due to mechanical breakdown and was left with 58 A11s and 16 A12s. (TM2447-A3 4RTR, The Tank Museum)





German troops seeking sanctuary in villages like Agny, where Sgt Tommy Pallas of B Company stormed a building containing 25 Germans. Still, C and D companies managed to push into Achicourt by 1530hrs: C Company then secured Beaurains, D Company occupied an orchard south of the village and A Company was in reserve. Jeffreys, who had lost contact with Miller, found C Company 'in good heart but extremely tired ... They had all this marching through the previous days, had had little rest ... and they'd been marching since this early morning, fighting a bit, but march, march, march' (quoted in Moses 1995: 134). The Germans seemed worse off and Jeffreys' driver, Pte George Icton, described how demoralized they were – after evacuating some wounded, he waited in a sunken road between Beaurains and Agny and 'bumped into a German artillery position' whose gun crew gave up. He then encountered other German soldiers who 'were dejected, they were beat. They wanted to be taken prisoner'; and described how in many cases the enemy 'surrendered rather than were captured ... They were shattered' (quoted in Moses 1995: 135). He drove his truck to the nearest friendly positions, with the Germans trudging along in front of him.

Rommel was not present at Agny or Beaurains, but later stated how British tanks had 'created chaos and confusion among our troops' (Liddell Hart 1987: 32). He wrote that 'Very powerful armoured forces had thrust out of Arras and attacked the advancing 1st Battalion of the 6th Rifle Regiment, inflicting heavy losses in men and material. The anti-tank guns which we quickly deployed ... were put out of action by gunfire, together with their crews, and then overrun by the enemy tanks' (Liddell Hart 1987: 33). When a howitzer battery crew left their guns Rommel rallied them and went from gun to gun giving crewmen their targets. AR 78 intervened to save SR 6 and Vaux discovered their effect – 20 British tanks stood motionless in front of a rise called Telegraph Hill, knocked out by 4. and 5./AR 78 on the hill and 6./AR 78 nearby. Maj Stuart Fernie took charge as Lt-Col Fitzmaurice had been killed. The German batteries were within range of 50th Division guns behind the Scarpe, but according to Jeffreys, having a forward observer with tanks

Along with 35 A11s, 4th RTR had six A12 Matilda tanks lent from 7th RTR (equipped with a 2-pdr gun and machine gun). Here, the Matilda, whose discovery at Arras prompted the Germans to fit a 5cm gun to their PzKpfw III, is shown on exercise in late 1940. (Cody Images)

was not yet standard practice. Miller had to spot for the battery supporting his battalion, but could not observe the fall of shot and used messengers to tell gun crews what map grid reference to fire upon.

Miller was told by Martel not to push beyond Beaurains because 8th DLI was making slower progress; in any case, tanks from 5. Panzer-Division were making an appearance, which, with 4th RTR heavily depleted, precluded any further British advance. In addition, at 1900hrs, Rommel 'gave orders for the Panzer Regiment to thrust south-eastwards' (Liddell Hart 1987: 33), albeit against an anti-tank screen in front of 8th DLI and tanks from 3e DLM. At 2015hrs, with Beaurains under heavy bombardment, Miller decided to withdraw. Capt Vernon Ferens, mounted on a motorcycle, was his messenger; he 'had to take his chance and go' when Miller told him 'to tell the company commanders to withdraw, to consolidate back at the Scarpe' (quoted in Moses 1995: 136). At 2030hrs, Jeffreys received the order and personally told company commanders. The move would not be straightforward because German tanks and infantry were starting to press around Beaurains.

Darkness covered the British withdrawal, but led to difficulty identifying friend from foe; Jeffreys with a 4th RTR officer observed tank silhouettes moving down the road from C Company positions. They went up to the leading tank, which stopped at the crossroads, and 'in the gloom at about ten paces, I looked straight at the man with his head out of the top of the tank'; he realized he was German and 'that he was going to open up on us. But I thought that the thing to do was to get down in front of his tank so he couldn't depress his guns at me' (quoted in Moses 1995: 137). He got into a ditch and British tanks turned up to engage the Germans. Vaux had similar difficulties when, after taking a wrong turning, he found himself among a German vehicle column. He described how 'As long as we kept moving, there was no reason why anybody should know who we were' (quoted in Levine 2010: 95); his driver deliberately crashed into a truck and the Germans were glad to see them depart off the road. He told of the confused situation in the dark: 'There were flames, smoke, our vehicles, the carriers of 6/DLI, soldiers of the 6/DLI on foot; there were German soldiers, some doubtless prisoners, but others were on motorcycles' (quoted in Holmes 1997: 177). Maj Ronnie Roddom and 1/Lt Perceval Maxwell, covering the withdrawal, were taken prisoner after misidentifying armoured vehicles as Allied. Ferens, now in a carrier, was told to inform the brigadier that the battalion was withdrawing behind the Scarpe, but in the dark failed to locate brigade HQ and was taken prisoner.

Beaurains was located south of Arras and on the main road south to Bapaume. Here, that road is shown. By 1800hrs, C and D companies, 6th DLI, had cleared Beaurains and captured 200 prisoners. C Company occupied the village and D Company deployed around an orchard and sunken road south of the village. (Author's collection)





At 2100hrs the British retreat reached the crossroads between Beaurains and Achicourt and some 4th RTR tanks turned up to engage German tanks close behind. Y Company, 4th RNF held position here and was overwhelmed as orders to pull out were never received. Overall, Jeffreys described 'a pretty disorganised scene ... there were men scattered about' (quoted in Moses 1995: 138); he called out and after finding a few men, rested up because they were exhausted. On the other side of Achicourt he found a 15-cwt Morris truck in working order and started ferrying men back up Vimy Ridge. Others, including Miller, made it back to the ridge that night; however, what was left of the battalion was fragmented, with many directed to La Bassée. In all, 200 men had been killed, wounded or captured; another 200 at La Bassée ended up in Boulogne, and Jeffreys was left with the remaining 200. After the battle an exhausted Miller gave up command to Jeffreys. The battalion held position as reserve to 9th DLI on Vimy Ridge, but was relieved late on 23 May and transported to the Yser Canal, which they defended on 28 May, before embarking at Dunkirk at 2000hrs on 1 June.

According to the German battle report, Arras cost Rommel 378 officers and men killed, wounded and missing; however, the missing figure is an underestimate because 400 German prisoners were taken. I./SR 6 suffered the most casualties of any German battalion in the campaign; during the battle Major von Paris had taken refuge in a farm building occupied by 8th DLI before he managed to escape. About 30 German tanks had also been destroyed.

The following day the Germans sought to isolate Arras, but little progress was made, and on the evening of 23 May the garrison broke out under the cover of darkness; security rather than exploitation was now the Germans' main concern, and 6. and 8. Panzer-Divisionen were pulled back to guard the flank of the German breakthrough. Liddell Hart thought the strategic consequences of the battle of Arras were profound and led directly to the 24 May halt order transmitted to the Panzer divisions, which, dispersed and without infantry support, were vulnerable to further counter-attacks. When the halt order was rescinded, crossing La Bassée Canal on 27 May would be a tough proposition for Rommel.

Leutnant Stahlberg described the limitations of the 3.7cm anti-tank gun, depicted here in May 1940: 'Our ammunition was no match for the English armour and the bullets rebounded off the slanting surfaces. To produce any effect we had to hit the turret ring of the tank or its heavy tracks, which were vulnerable. Hitting a turret ring jammed the turret, destroying a track sent the tank revolving round itself' (Stahlberg 1972: 143). At Arras, PSM Armit of 4th RTR engaged 3.7cm guns thought to have knocked out Lt-Col Fitzmaurice's tank, and destroyed a couple before his gun malfunctioned. He repaired it while under fire from four other guns and withdrew into cover. When a smoke discharger ignited in his turret the Germans 'must have thought I was finished', but Armit's tank re-appeared and 'caught the guns limbering up' (quoted in Holmes 1997: 176). (Bundesarchiv Bild 101I-127-0391-21 Foto: Huschke)

Calais

24–26 May 1940

BACKGROUND TO BATTLE

Rather than evacuate the BEF, Churchill hoped to keep his army supplied via the Channel ports. On the evening of Monday 20 May, both Nicholson's 30th Infantry Brigade, deemed to be ideal for escorting supply convoys, and 3rd RTR were ordered to Calais. Nicholson was bereft of intelligence. The map issued to him by the War Office was 'devoid of useful information' (Neave 1972: 37). Despite RAF reconnaissance sorties detecting Guderian's approaching XIX. Armeekorps (mot.), consisting of 1., 2. and 10. Panzer-Divisionen, Lt-Col J.A.M. Ellison-Macartney, CO 1st QVR, was simply told that 'a few German tanks have broken through to the Channel ports' (quoted in Neave 1972: 60). His battalion had never trained with 30th Brigade, 200 militiamen had recently been incorporated, each company had only ten Bren guns and five Boys anti-tank rifles, and a third had revolvers instead of rifles; such was the rush that the battalion departed its base at Ashford in Kent without vehicles and so would fight 'in a role divorced from its training and practice' (quoted in Neave 1972: 57). On Wednesday 22 May, after landing in Calais the men of 1st QVR dispersed to secure the main approach roads into town. Already in France and near Calais was 1st Searchlight Regiment but, according to troop commander 2/Lt Airey Neave, the men – a mixture of pre-war Territorials and new militia – were equipped with 'rifles, which many had never fired', some Bren guns, and 'a weapon known as the Boys anti-tank rifle which no one had dared to touch' (Neave 1972: 34).



Guderian reached the Channel at Abbeville on 20 May but, after the British counter-attack at Arras, 10. Panzer-Division, commanded by Generalmajor (later General der Panzertruppen) Ferdinand Schaal, was placed in reserve at 0600hrs on 22 May. As a consequence, the war diary of XIX. Armeekorps (mot.) noted, Schaal lost an opportunity to advance 'quickly and decisively ... northward from the Somme area' (quoted in Cooper 1978: 228). The British at Calais were given a further reprieve by Guderian's directive that, to protect his tanks, Generalleutnant Friedrich Kirchner's 1. Panzer-Division should avoid battle there 'under all circumstances' (quoted in Neave 1972: 39); if a *Schützen-Regiment* was not able to take the city by surprise on 23 May, the division was ordered to advance on Dunkirk instead. That afternoon, various engagements convinced 1. Panzer-Division's Kampfgruppe *Krüger* that Calais 'was strongly held by the enemy and that a surprise attack was out of the question' (war diary, quoted in Neave 1972: 43–44): searchlight troops delayed the German tanks at Les Attaques on the Saint-Omer Canal and their infantry at Orphanage Farm near Coulogne, and the recently arrived 3rd RTR encountered a stronger German column near Guînes.

Keller's appearance on the road to Guînes was fortuitous in the extreme. Preparing 3rd RTR for battle had been frustrating. On the night of 22/23 May the tanks, which according to Maj Bill Reeves, OC B Squadron, 'had been loaded badly and in the wrong order' (quoted in Buck 2013: 6:8), were gradually disembarked. Frequent power cuts meant that derricks rather than cranes were used to lift them through the hatches. Dock workers were jittery, according to Sgt Bill Close: 'Every time the sirens went off, they bolted into shelters' (Close 2013: 19). As well as cleaning guns and properly mounting them, the British tankers had to feed ammunition into belts by hand because

3rd RTR deployed with 27 cruisers, but had conducted no training with infantry. The A9 cruiser, shown here knocked out in Calais, had a 2-pdr gun, coaxial machine gun, and a couple of machine guns in small turrets on the front of the hull. The A10 had a 3.7in mortar, which mostly carried smoke shells. The A13 had a 2-pdr and a co-axial machine gun. In 1939, one-third of crews had been replaced by men from a training unit. Lt-Col Reginald Keller, a World War I veteran appointed CO 3rd RTR in October 1939, was also angry; about to sail to Normandy along with the rest of 1st Armoured Division, when told of his new orders, he replied that making his tanks ready for battle would take a day because their guns had been packed in thick mineral jelly. (Bundesarchiv Bild 146-1971-042-10 Foto: o. Ang)



Mark VI light tanks train alongside Bren gun carriers in January 1940. Along with cruisers, 3rd RTR had 21 Mark VI tanks equipped with 0.303in and 0.5in machine guns for reconnaissance and liaison (1st Army Tank Brigade had only 12 light tanks at Arras). When German tanks were encountered on 23 May, Capt O'Sullivan reported the 'light tanks were naturally ineffective' (quoted in Cooksey 1999: 69). At 1430hrs near Guînes Keller's tanks sighted advanced elements of Kampfgruppe *Krüger*. According to Close, initially 'the long days on the Dorset ranges paid off' (quoted in Buck 2013: 8:14), but O'Sullivan reported how quickly 'the enemy were able to concentrate superior firepower on us' (quoted in Cooksey 1999: 69). Keller withdrew after six light and six cruiser tanks were knocked out. Nicholson thought Calais would be attacked imminently but 1. Panzer-Division, persuaded of the strength of the defences there, broke contact and advanced towards the Aa Canal, 15 miles from Dunkirk. (Cody Images)

no mechanical loaders were available. When each tank was ready, a crew was assembled from whoever was available. Capt Barry O'Sullivan, recently returned from India, hardly knew his crew and had no HE rounds for his 3.7in mortar. Their mission was also unclear. The Adjutant-General, Lt-Gen Sir Douglas Brownrigg, told Keller to make contact with 20th Guards Brigade in Boulogne (under attack from Generalleutnant Rudolf Veiel's 2. Panzer-Division); however, that evening a GHQ liaison officer arrived with orders to go to Saint-Omer. At 0300hrs on 23 May Brownrigg re-affirmed Boulogne as the objective, but at 1400hrs Keller decided to set off south to Saint-Omer via Guînes. The personnel of the motor battalions, although at Calais by 1200hrs, could not support him because their vehicle transports missed the tide, which postponed unloading until late afternoon.

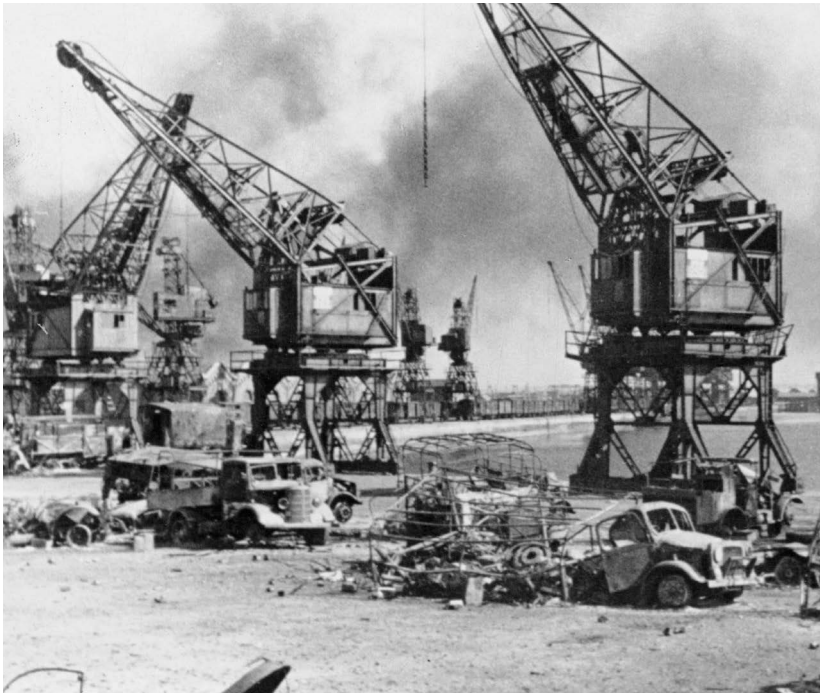
10. Panzer-Division, returned to Guderian's command on the morning of Keller's advance, took over the German advance to Calais. In order to avoid expected congestion with 1. Panzer-Division's supply lines, Schaal ordered the main approach, by three *Schützen* battalions (I. and II./SR 86 and I./SR 69) under Oberst (later Generalleutnant) Wolfgang Fischer with attached anti-tank, artillery and combat-engineer units, from the west through high ground around Coquelles; another column under Oberst (later Generalleutnant) Erwin Menny, comprising a reinforced battalion (II./SR 69), approached from the south. PzRgt 7, marching separately, reached a forest north of Desvres by 0100hrs.

Nicholson deployed his forces to achieve the objective now assigned him by the War Office: 'Evacuation decided in principle. When you finished unloading [*sic*] your two M.T. ships commence embarkation of all personnel except fighting personnel who remain to cover final evacuation' (quoted in Neave 1972: 91). He ordered the outer perimeter held and the canal around the old town occupied to cover the final evacuation, planned for the evening of 25 May. On 23 May, 2nd KRRC had marched to the outer perimeter to support 1st QVR: C Company to the north-west sector, B Company the western, D Company the southern and A Company was in reserve. 1st RB,



commanded by Lt-Col Chandos Hoskyns, predominantly defended the eastern perimeter. Ammunition and other equipment were unloaded through the night. Maj Poole told his scout-platoon commander, 2/Lt 'Gris' Davies-Scourfield, 'The enemy is only thought to be a weak column trying to fight its way back to the German lines' (Davies-Scourfield 2004: 19). At 0400hrs the following morning, 2/Lt Dick Scott's carrier troop reconnoitred towards Coquelles and brought out 20 searchlight personnel. At 0500hrs he repeated his endeavour, but was ambushed by an anti-tank gun. Only a single carrier returned and Scott made it back on foot through German lines. High hopes the men had on landing were soon replaced by a 'grim determination to resist and stick it out' (Davies-Scourfield 2004: 40).

A column of A10s on the move. On 23 May, 2/Lt Davies-Scourfield spotted 'tanks heading towards the centre of the town which looked large and comfortably formidable' (Davies-Scourfield 2004: 16). Neave summed up 3rd RTR's role: 'They had never been trained to work with infantry, they had never co-operated with Nicholson's brigade before and their tanks were very vulnerable in street fighting. But their patrols encouraged the infantry throughout the battle' (Neave 1972: 165). Maj Simpson, commanding A Squadron during the Calais battle, recalled that at Guines he 'could do nothing with my tank [an A10] as I had only one effective MG and a smoke mortar'; he could 'only watch other tanks fighting and not hit back myself' (quoted in Cooksey 1999: 70). (Cody Images)



On 23 May, Neave described 'a clear day and I could see the cliffs of Dover' (Neave 1972: 95). However, black smoke from a burning oil refinery, the sight of the sinking destroyer *Wessex*, and the noise of gunfire reminded him 'The real battle was about to begin' (Neave 1972: 96). Here, the port facility is shown with burning oil tanks in the background. (Bundesarchiv Bild 146-1971-042-88 Foto: o. Ang)

I./SR 86 and 2nd KRRC at Calais, 24–26 May 1940

MAP KEY

1 Mid-morning, 24 May: Oberleutnant Georg Baumunk's 5./PzRgt 7 supports II./SR 69's advance through Coulogne into the southern outskirts of Calais and his vehicle is knocked out.

2 1200hrs, 24 May: I./SR 86, supported by armoured vehicles from II./PzRgt 7 or armoured cars of PzAufklAbt 90, advances on Bastion 9. 2/Lt Davies-Scourfield's men of B Company, 2nd KRRC, hold this position throughout the day.

3 1630hrs, 24 May: II./SR 86 takes the outlying Fort Nieulay.

4 Late afternoon, 24 May: I./SR 69, supported by 6./PzRgt 7 and a platoon from 8./PzRgt 7, advances from Fontinettes against D Company, 2nd KRRC.

5 Evening, 24 May: 2nd KRRC withdraws to Calais-Nord behind the canal line.

6 Night of 24/25 May: Maj Cromwell's D Company, 2nd KRRC, blocks the Freycinet and Georges Cinq bridges with abandoned vehicles, and HQ Company, 2nd KRRC, blocks the bridge at Pont Faidherbe. B Company, 2nd KRRC, occupies defensive positions behind the canal around La Place Norvège. A Company, 2nd KRRC, is in reserve along the Rue de Victoire. C Company, 2nd KRRC, occupies the north-west perimeter line.

7 0800hrs, 25 May: After an artillery bombardment, I./SR 86 advances against the main railway station and II./SR 69 advances

against Calais-Nord from the south. PzRgt 7 is in reserve.

8 1830hrs, 25 May: Tanks carrying explosive charges from 3./PzPiBtl 49 attempt to clear the roadblocks on Pont Freycinet, Pont Georges Cinq, and Pont Faidherbe. All the tanks are neutralized; only at Pont Freycinet do follow-up German infantry secure a small lodgement, which is contained by a counter-attack by Capt Stanton of A Company, 2nd KRRC.

9 1000hrs, 26 May: Another German ground attack against the bridges starts and is initially repulsed, but by 1100hrs German tanks and infantry are crossing Pont Freycinet and by midday Pont Georges Cinq and Pont Faidherbe are also in German hands.

10 1300hrs, 26 May: By this time D Company is in the Rue Notre Dame, C Company on the Boulevard des Allies, A Company the Place d'Armes and HQ Company the Place d'Angleterre, but B Company at La Place Norvège has not retired because orders to do so have not arrived.

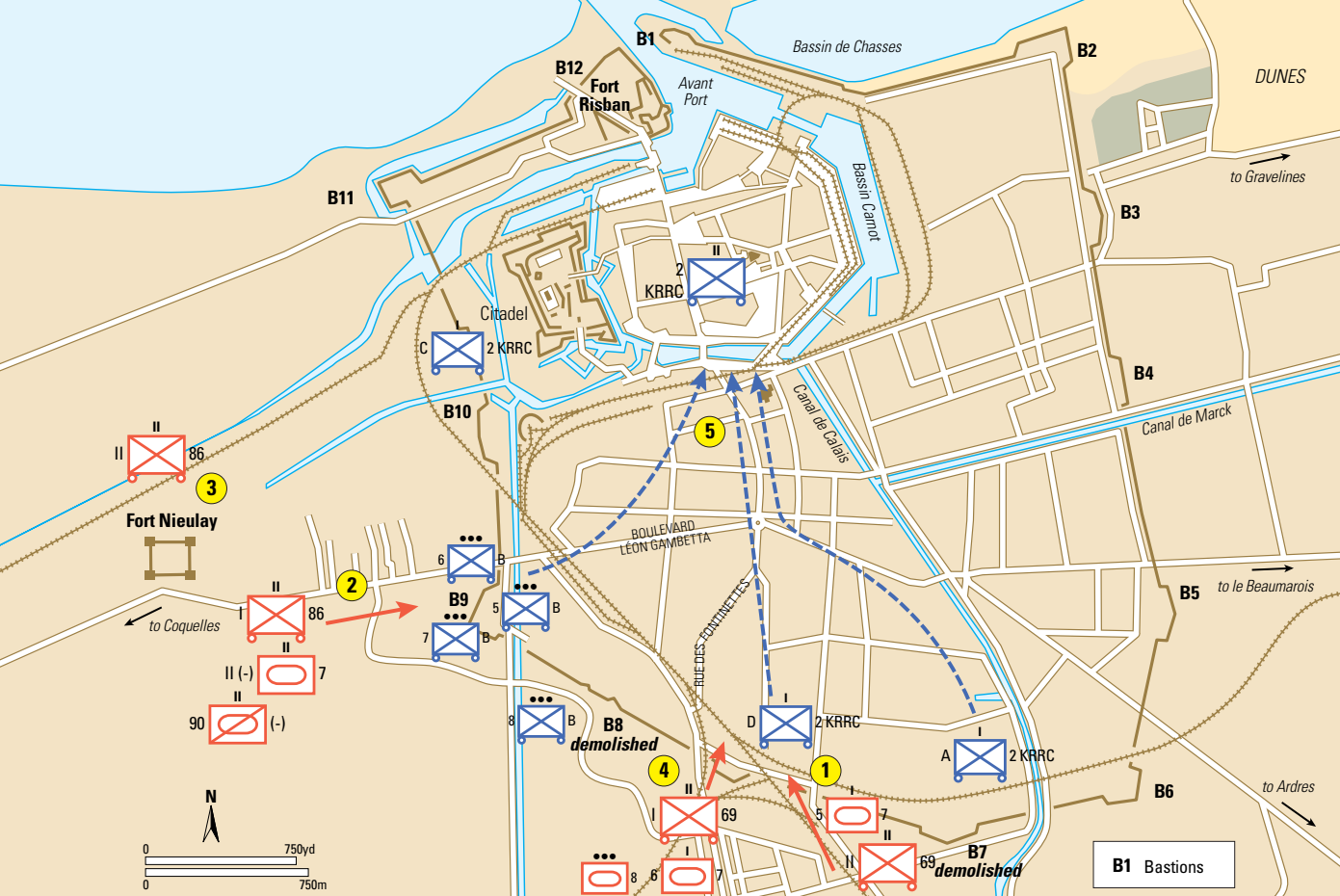
11 1500hrs, 26 May: By this time, the Citadel is surrounded and Brig Nicholson is soon captured.

12 1600hrs, 26 May: 2nd KRRC gathers around the Place d'Armes: C and A companies in the square, D Company along the road leading to the cathedral, and HQ Company in the cathedral area. Miller orders the battalion to scatter, and organized British resistance is at an end.

Battlefield environment

Calais has an old town around the port (Calais-Nord) separated by a line of canals from the new town to the south (Calais-Saint-Pierre). Nicholson set an outer perimeter 6–7 miles in circumference that encompassed both areas. Within Calais-Nord on the western side lay the Citadel, with four bastions and thick walls. All other battlements along the canal line had subsequently been dismantled, but around the outer perimeter 12 bastions constructed in the 1880s, linked by ramparts and earthworks but intersected by roads, mostly remained. Here, the defences seemed strong, but Lt-Col Euan Miller, CO 2nd KRRC, described many weaknesses: in some areas the ramparts 'were extremely exposed', the moat in places was 'a good obstacle, but in others it was easily passable by infantry', and in the south-west the 'rampart and moat practically disappeared and

there were several comparatively new bridges and other crossings' (Miller: 25). Once the rampart was bypassed, the long boulevards in Calais-Saint-Pierre would be defenceless against German tanks; rather, the canal around Calais-Nord was the best line on which to stop them, but Nicholson thought this inner perimeter provided no means of observing the enemy. Miller asserted that the chief difficulty fortifying the houses along the canal line was that 'most of them could only be entered from the front in full view of the enemy'; on 24 May 'work was at once begun on breaking into them from the back and through the side walls for communication. Adequate tools, however, were lacking and ... it was never completed' (quoted in Neave 1972: 136). In addition, Pardoe described how: 'The ground was bone dry, and the sand got into our boots, and clogged our weapons' (Buck 2013: 13:15).



INTO COMBAT

At 0330hrs on Friday 24 May, Schaal launched both *Schützen* attack groups, each to be supported at midday by a Panzer company from Major von Grundherr's II./PzRgt 7 arriving from Desvres. By mid-morning Menny, advancing from Guînes, took Coulogne. Here, defensive ramparts occupied by Maj Cromwell's D Company were full of gaps for level crossings and bridges, which siphoned the attackers. When Oberleutnant Georg Baumunk's 5./PzRgt 7 did advance on the Chemin de Regniers, near the junction with Rue Henri Lefebvre, the Panzers were ambushed by a concealed troop of anti-tank guns and a light tank. Four PzKpfw II tanks were knocked out in quick succession, including Baumunk's. His driver, Unteroffizier Hermann Reinhard, was killed while baling out, but the other crew members survived.

Later that afternoon, a couple of platoons from A Company moved up to help 1st QVR's D Company cover gaps in Cromwell's line; at the railway bridge across the Rivière Neuve they stopped I./SR 69, north of Rue des Fontinettes, along with 6./PzRgt 7 and a platoon of PzKpfw IV tanks from 8./PzRgt 7. In Cromwell's 15 Platoon sector, platoon commander 2/Lt F.T. Williams reported 'Later in the day two enemy tanks attacked our bridge but we drove them off setting fire to one' (Williams: 7). Rfmn Havers disabled an enemy tank with an anti-tank rifle from a spot where an emplaced anti-tank gun had already been destroyed by tank fire.

Meanwhile, on the western side of town, the war reporter Hubert Borchert wrote that 'The target is the railway line which, in the west runs like a fortification line along the whole town, and the Fort Nieulay' (situated outside the outer perimeter); while II./SR 86, helped by artillery on the ridge above Coquelles, forced Nieulay to surrender at 1630hrs, regarding the rail line Borchert could only report 'There is only a slow advance. The adversary defends himself with the courage of despair' (quoted in Cooksey 1999: 119–20). Davies-Scourfield defended Bastion 9, the main position, which consisted of concrete blocks set among scrubland. He had a section from 7 Platoon, a couple of sections from 6 Platoon, and some company HQ personnel. The rest of 7 Platoon was out front and his own scout platoon was company reserve. 8 Platoon, 600yd to the south, was out of sight, 'which precluded any close interlocking fire plan' (Davies-Scourfield 2004: 21), but 1/Lt Michael Sinclair's scout platoon from A Company maintained contact with the 8 Platoon and D Company on their left. Maj Poole told Miller of the 'difficulty of adequately safeguarding such a long front' (Miller: 9); however, Davies-Scourfield found he could move in comparative safety behind stone masonry along the rampart.

At 1200hrs, I./SR 86 under Major Graf von Strachwitz and 'German tanks [from PzRgt 7, or armoured cars of PzAufklAbt 90] suddenly appeared on the high ground' near Coquelles; Davies-Scourfield 'wondered how we would stop them if they kept just rolling forward' (Davies-Scourfield 2004: 24). They were held up by a stream or sunken road (suggesting some may have been armoured cars) and in the interim Poole arranged for three light tanks to be brought up by platoon commander 2/Lt Tresham Gregg. Davies-Scourfield asked Gregg 'whether the Redoubt [Bastion 9] would be of any use as an obstacle to the tanks and whether our Boys rifles would be effective, at least at close range.' 'None whatever', Gregg replied, rather negatively. 'They'll laugh at this bank, and your Boys rifles wouldn't blow a track off at point-blank range. Our only



hope is to bluff them, make them think we have a big force here' (Davies-Scourfield 2004: 24). A couple of 2-pdrs from 229th Battery, whose transport arrived with eight instead of 12 guns, were brought up by Maj Poole and situated behind a roadblock in a small fold of ground and in a building nearby; however, they were quickly put out of action by tank fire.

A couple of German infantry companies with ten armoured vehicles advanced 'with their tanks and infantry closely co-operating together' (Davies-Scourfield 2004: 24–25). 8 Platoon destroyed a couple with anti-tank rifles. When German infantry approached within 400yd of the main positions, 7 and 8 platoons were 'withdrawn inside the ramparts of the redoubt to the left of the road' (Miller: 29) and British anti-tank rifles destroyed another armoured vehicle. *Schützen* occupied houses and gardens in front and Bren guns engaged those who made themselves known, but the British 'were careful not to blaze off too much ammunition, as the resupply situation was uncertain' (Davies-Scourfield 2004: 25). German tanks edged back into safe positions, especially when under fire from anti-tank rifles: if hit three or four times 'they would then put down a bit of smoke or they would pull back behind the house' (Davies-Scourfield 2004: 25). Still, infantry and tanks appearing in gardens kept 'us busy with their machine guns. We replied with some intense firing ... while Gregg's tanks darted here and there, using their mobility to good effect' (Davies-Scourfield 2004: 25).

British reinforcements, consisting of 80 searchlight volunteers with Neave, joined Poole at Boulevard Léon Gambetta and a cruiser tank was stationed at the eastern end of the street. Another searchlight platoon along with HQ Company blocked three bridges – Pont Freycinet, Pont Georges Cinq and

Bugler Edward Watson of 1st QVR described an anxious move across a square: 'It was a cobbled square, and as I was running along, I could see the bullets down by my feet, and the puffs of dust coming up as the bullets ricocheted. I looked down once, and then didn't look down any more. I just ran on' (quoted in Levine 2010: 121). Others were not so fortunate, as is evident here at a hastily improvised roadblock. (Bundesarchiv Bild 146-1971-042-18 Foto: o. Ang)

E.G.B. Davies-Scourfield

In 1938, aged 20, 'Gris' Davies-Scourfield joined 2nd KRRC as a junior officer because 'as a younger son and not having great financial backing, the Army seemed to offer something that I wouldn't get elsewhere, sport, outdoor life and particularly horses' (quoted in Buck 2013: 1:8). He was soon made commander of B Company's scout platoon and since the start of the war waited 'sometimes with great impatience, for the opportunity of getting to grips with the enemy' (Davies-Scourfield 2004: 1). New 2nd lieutenants recently graduated from Sandhurst arrived from September

1939: Dick Scott took over 6 Platoon, Wally Finlayson 7 Platoon, and Martin Willan 8 Platoon. After the surrender at Calais, while in transit to a POW camp, he was reunited with Finlayson and his company commander Maj Poole, but learnt that nine other officers of the battalion had been lost. After an unsuccessful escape attempt took him to Warsaw, transfer to Colditz Castle followed. After the war, he returned to active service, commanded 1st Battalion, The Rifle Brigade, and retired as a brigadier in 1973. He passed away in 2006.

Pont Faidherbe – that led into Calais-Nord. Neave described bullets and tank rounds ricocheting in all directions off paving stones. Poole shouted at him to 'Get your people in the houses on either side of the bridge and fire from the windows' (Neave 1972: 118). From a nearby café the proprietor, serving cognac and wearing a Croix de Guerre, was full of encouragement. Buildings were burning and Neave, as he sought to return to the café, suffered a bullet wound and was evacuated in a medical van.

Schaal had hoped to take Calais that day; but his war diary concluded 'Enemy resistance from scarcely perceptible positions was however so strong that it was only possible to achieve slight success' (quoted in Davies-Scourfield 2004: 27). At 1600hrs, Guderian arrived and told him: 'If there are heavy losses during the attack on Calais, it should only be continued with support from dive-bombers and when heavy artillery can be brought up after the surrender of Boulogne. There must be no unnecessary losses' (quoted in Neave 1972: 70). Schaal temporarily called off further assaults.

That evening Miller 'decided that it would be impossible to hold positions another day' (Miller: 32). According to L/Cpl Doe, most of the company's vehicles had 'been bombed and blown up, so from then on there was no food, there was nothing, there was no ammunition' (quoted in Buck 2013: 11:26). Because the wireless sets were in the company's transport, Poole reported for verbal orders and was told to withdraw from the outer perimeter. Davies-Scourfield covered the retreat with his five remaining carriers. 2nd KRRC took up positions on the western side of the inner perimeter with 1st RB on the eastern. Nicholson was buoyed up by a War Office telegram that stated an infantry brigade from 48th Division was on its way (the brigade was actually diverted elsewhere). He still thought an evacuation would be carried out on the night of 25/26 May and moved his HQ to the Citadel. However, Maréchal Maxime Weygand, commander-in-chief of the Allied armies, demanded the evacuation be cancelled; because he thought Calais 'occupies a large part of the enemy's armoured forces and keeps them from attacking our communications' (quoted in Neave 1972: 150), Churchill, to the dismay of the War Office, agreed.

During the night of 24/25 May, Cromwell retrieved a 2-pdr gun and set up his HQ at the post office on Rue Edison near Place de Richelieu. He told Williams to deploy on the upper floors of a hotel opposite and some buildings

Karl Maus

Major Karl Maus, born in 1898, enlisted in the German Army aged 16 in 1914 and in 1916 was promoted *Leutnant*. He fought on all three European fronts, but in 1922 retired to study dentistry. However, on 1 September 1934, he was accepted for military service again, as a *Hauptmann* with II./SR 69 based in Hamburg. He was promoted *Major* on 1 April 1938. In May 1940 his battalion was part of Oberst Menny's *Kampfgruppe* that advanced from the south through Guînes. When the canal bridges around Calais-Nord were attacked on 25 and 26 May, they advanced towards La Place Norvège and Pont Georges Cinq. Maus planned the set-piece attacks against the bridges, ensuring artillery support was in place and positioning the heavy weapons of

his battalion for maximum effect. During the fighting, he observed developments from vantage points on the south side of the canal and decided when to commit reserves. He commanded his battalion in Russia in 1941, before assuming command of SR 33 as an *Oberst* in April 1942. He fought at Kursk in July 1943 and in January 1944 was appointed commander of 7. Panzer-Division. Despite serious wounds, he commanded the formation during the retreat to Germany. He ended the war as *General der Panzertruppen* and was one of the most highly decorated soldiers of the Wehrmacht, awarded the Knight's Cross with Oak Leaves, Swords and Diamonds. He went back to dentistry after the war and died in 1959.

on the Quai de L'Escaut overlooking the canal. The side of the hotel was on the road that led to the Pont Georges Cinq and beside the building lay a line of sandbags placed just before the exit on to Place de Richelieu. As no engineers, explosives, mines or wire were available to the British, defensive positions were improvised. Windows were barricaded with oak tables and gilt chairs. Civilians as well as various uniformed Allied soldiers not under command had to be removed.

2/Lt Philip Pardoe of C Company described how the 'Germans appeared to adopt a regular routine. All shelling stopped around midnight, when they presumably went to sleep and they would not start again until about 7 o'clock, after they had shaved and breakfasted' (Buck 2013: 13:3); the Germans 'had the whole night in which to improve their positions undisturbed' (Buck 2013: 15:9), but failed to do so. With the morning, Rfmn Sandford (of 4 Section, 2 Platoon, A Company) was behind a roadblock of three carriers on Rue de Victoire. Early in the morning of Saturday 25 May the British sent carrier patrols south of the canal. Sinclair was ambushed when a ball of fire 'crashed

Securing the inner perimeter depended upon destroying the bridges separating Calais-Nord from Calais-Saint-Pierre. Here, the Pont Georges Cinq (formerly Pont Richelieu) across the canal that separated Calais-Nord from Calais-Saint-Pierre is shown from the south. While 1.5 tons of gelignite had been unloaded, the dock demolition party under Cdr C.S.B. Swinley RN reported the primers for the explosives were unsuitable – and his priority was to damage the docks. The bridges' destruction was made a French responsibility, but they did not have the resources for the task. Instead, during the night the bridges were blocked with abandoned vehicles, 'barricades were constructed across the streets leading off the canal, and houses commanding the bridges were made into firing positions' (Neave 1972: 136). (Author's collection)



into the front of his carrier, passing between him and the driver, tearing apart the frontal armour and smashing into the engine at their back. The carriers behind him moved immediately to cover while he ordered his own crew to bale out' (Davies-Scourfield 2004: 32–33). Davies-Scourfield was told to use his carriers as roadblocks.

By 0830hrs, the initial German bombardment had shattered houses nearby. A sergeant told his small group to take cover and Sandford 'lay between the tractors and was wedged under the steel bottom' (quoted in Buck 2013: 13:10). Williams visited about a dozen positions and told how during the artillery bombardments 'as many men as possible would shelter and rush out to man the barricades when it lifted' (Williams: 10). After the shelling Sandford, joined by the rest of his platoon, 'rested their rifles on the steel sides on the carriers and pointed them along the Rue de Victoire. There was a clip on the side of my carrier and I put my rifle in and used it as an aiming rest. Major [F.L.] Trotter [OC A Company] stood behind us and we were ready and waiting for the Germans to attack'; however, the 'expected attack was not launched' (quoted in Buck 2013: 13:11) as the bombardment was intended to intimidate, and the carriers were driven off.

On 25 May, while II./SR 86 attacked Fort Lapin outside the outer perimeter, Schaal pushed I./SR 86 towards the northern railway station and in heavy fighting Strachwitz was mortally wounded; I./SR 69, attached to support Oberst Menny's II./SR 69, headed towards Calais-Nord from the south. The tanks were kept in reserve near Guînes because the Oberkommando des Heeres (OKH), fearing tank losses, now forbade their use in built-up areas. That morning, the town was prematurely reported taken when a swastika was observed flying from the Hôtel de Ville clock tower south of the canal, but the Germans soon discovered the bridges were blocked. Still, at 1100hrs Schaal – expecting the beleaguered garrison to surrender – sent the captured mayor to negotiate. Nicholson told him 'If the Germans want Calais they will have to fight for it' (quoted in Neave 1972: 146).

In the afternoon Davies-Scourfield, occupying a house in La Place Norvège turned into a strongpoint by Sgt Wall, experienced 'accurate mortar fire, directed from the tall tower of the Hôtel de Ville, which overlooked most of the old town' (Davies-Scourfield 2004: 37). Poole had given him the latest orders from Miller: 'Present positions will be defended at all costs to the last round and the last man'; during training this order had seemed pompous, but now 'it seemed appropriate to the general atmosphere of rubble-strewn streets and burning buildings' (Davies-Scourfield 2004: 37–38). Indeed, such an approach was confirmed when Nicholson received a message from British Foreign Secretary Anthony Eden at 1400hrs, telling him the defence of Calais was now 'of highest importance to our country' (quoted in Neave 1972: 150). At 1500hrs, during an hour's ceasefire, another emissary, Oberleutnant Hoffmann of II./SR 69, informed Nicholson of an impending Stuka and artillery bombardment, but Nicholson was unmoved and told him that 'it is the British Army's duty to fight as well as it is the German's'; Schaal ordered an 'Attack over the canal and advance to the old town up the harbour and pier' (quoted in Neave 1972: 152). Prior to the assault at 1830hrs 'a regular bombardment from 24–30 guns' developed, with the barricades experiencing 'very accurate mortar fire' (Miller: 44).



Sandford described the effects. His anti-tank rifle, which he 'had fired during our battle course but only at a stationary tank made of wood and canvas' (quoted in Buck 2013: 13:14), was destroyed, and he hid behind a stack of tiles, which disintegrated after a shell landed close by. Then a house opposite took a hit and hot shrapnel struck under his webbing belt, searing his battledress blouse. Despite the ferocity of the bombardment, most riflemen were able to move to alternative positions if their original spots had been made untenable. Doe told how in his building all the windows had caved in, yet 'some of the men were in there occupying positions all over the place. They took up some very, very strong positions' (quoted in Buck 2013: 13:24).

In Williams' sector, vehicles had been added to the sandbags near the hotel to form a proper roadblock and the obstacle was under heavy fire from across the bridge. German snipers were a constant danger and battalion HQ moved back 200yd to Rue des Maréchaux 'where lateral communication was possible with all Coys without being seen from Hotel de Ville' (Miller: 40). Once the bombardment stopped, three tanks from 3./PzPiBtl 49, each carrying an explosive charge on a metal support, began to cross Pont Faidherbe, followed by a saloon car. One tank forced the roadblock but was put out of action, another was also hit and stopped, and the third withdrew. The saloon car was knocked out at the German end. At Pont Georges Cinq another *Pionier* tank blew up,

At 1430hrs on 25 May, Nicholson used a mobile column of carriers from Lt-Col Chandos Hoskyns' 1st RB, supported by Keller, to make a flank attack to relieve pressure on 2nd KRRC. Hoskyns was reluctant as the assembly of the force disorganized the defence on the eastern side. The attack was abandoned when an overturned truck blocked the way. Neave asserted 'it was better to use patrols of two to three tanks in support of the hard-pressed infantry, fighting in the streets' (Neave 1972: 122). (© IWM F 4472)

reportedly on a mine but probably the explosive charge the tank laid detonated prematurely, and at Pont Freycinet another tank crossed with *Schützen* in support. Miller rushed a couple of reserve platoons under Capt Charles Stanton, 2IC of A Company, to the bridge (Trotter was in the medical aid post, wounded). The counter-attack forced the German tank to withdraw, but some *Schützen* remained in buildings on the British side. Stanton was wounded and died soon after while returning to battalion HQ. Miller now had no reserve remaining. The motor battalions were now down to 250 men each. A strong wind fanned the flames and dense clouds covered the town; at 2100hrs Nicholson received a telegram from Churchill that told him 'Every hour you continue to exist is of greatest help to B.E.F.' (quoted in Neave 1972: 105).

During the evening of the 25th Schaal called off further attacks because of a lack of ammunition. He reported 'the enemy will fight to the last man and holds strong and up to now unshaken positions'; his war diary also recorded the defenders' 'hitherto unheard-of obstinacy. They are English, extremely brave and tenacious. They have at least one reinforced infantry regiment, armour supporting them and naval guns firing from ships in the Channel' (quoted in Neave 1972: 168). Oberst Fischer moved his HQ to the top floor of the theatre in the Place Albert. At a German commanders' conference at 2300hrs, because targets for the Stukas for the following day supposedly could not be changed, some wanted a postponement of the attack until 27 May, but Schaal phoned Guderian and discussed the availability of heavy artillery and Stukas. Fischer described how some 'artillery pieces as well as the flak guns are moved at night ... to positions by the bridges over the canal separating the old and new towns, which represents a serious obstacle because it is constantly raked by fire from about 12 enemy machine guns sited in houses in the old town' (quoted in Guderian 1990: 160). Each attack group would receive a couple of 10.5cm howitzers and six 2cm anti-aircraft guns.

On the morning of Sunday 26 May, the German 'shelling and particularly mortar fire increased in intensity and accuracy' (Williams: 12). Then: 'Punctually at 9.30 a.m., the Stukas screamed down' (Neave 1972: 187); however, their effect was 'more moral rather than physical' (Miller: 51). During the aerial bombardment Davies-Scourfield noted how Poole was 'absolutely calm, totally unruffled and a real tonic for all with whom he was in contact' (Davies-Scourfield 2004: 44). Williams, helped by an unknown sergeant, engaged the aircraft with a Bren, and Sandford told how 'As the bombs exploded close by, the officers and I were laughing and cracking jokes' (quoted in Buck 2013: 15:8). Maintaining morale in such a dangerous environment was difficult and junior NCOs as well as officers provided inspiration. When a soldier was wounded, Pardoe described how Cpl Thomas McBride 'ran across and carried him on his back about 250 yards over open ground to Company Headquarters, while mortar shells landed all round him ... He impressed me more than any other rifleman ... and with his cheerful voice and manner did great work keeping up the men's spirits' (quoted in Buck 2013: 13:4).

The German ground attacks on the bridges, which followed close behind the bombardment, were less than propitious. Fischer reported 'On the southern edge of the old town, almost all the enemy's machine guns are back in operation, preventing us from crossing the canal, exactly as before. Courageous



and determined officers, NCOs, and men trying to cross are shot up' (quoted in Guderian 1990: 161). Doe described how the German attack was supported by tanks: 'The infantry was bunched up behind the tanks. Following behind in bunches, using the shelter of the tank. And once these tanks started blasting, there was very little you could do' (quoted in Levine 2010: 120). Capt Edward Duncanson, OC HQ Company, and L/Cpl D. Pickett, both already wounded, provided an answer: at 1000hrs, when a German tank advanced onto Pont Faidherbe supported by mortar fire and infantry, they fired their anti-tank rifle and Bren gun, which forced the German vehicle and accompanying *Schützen* to withdraw. However, at another roadblock Doe described the disappointment with his anti-tank rifle; he fired at a tank crossing 'the main bridge about 50 yards away, and I couldn't miss. It hit the tank – and knocked the paintwork off. That's all it done. It just bounced off, making a noise like a ping-pong ball'; an officer told him to clear off and 'We left the gun there and we scarpered' (quoted in Levine 2010: 120). Miller reported the roadblocks suffered 'Accurate mortar fire ... but the sniping made them finally untenable' (Miller: 53). By midday, *Schützen* were moving across in strength.

Williams, returning to the hotel, found 'odd troops, many of them unarmed and extremely loath to take part in operations. These were not KRRs. I put them on to filling magazines' (Williams: 13). At the bridge near La Place Norvège Davies-Scourfield met 2/Lt Wally Finlayson, OC 7 Platoon, belatedly showing an engineer around. Positions were holding in his sector,

Each *Schützen* company had a field radio from the battalion signals platoon. Here, shown in May 1940, is the portable Tornister transmitter/receiver. The receiver and power-supply box are lying separately on the ground, but clipped together for carriage. Each tank-platoon commander also had a transmitter/receiver, while each platoon tank had a receiver only. (Bundesarchiv Bild 146-1991-045-07 Foto: Lohmeyer)



Here, the Place d'Armes is shown, with the lighthouse visible on the right. During the retreat to this area, many from 2nd KRRC played a dangerous game of hide and seek. When Pardoe's group ran into German armoured vehicles taking a break in a square, 'there was an immediate rush into their vehicles'; entering a house they made for the upper floor, but soon the vehicles could be heard approaching, 'pouring machine-gun fire into the next door house, moving on to ours, stopping outside, and pouring their fire' into their house; it was 'a dreadful moment as we waited for fire to be poured on our floor ... but they moved on' (quoted in Levine 2010: 121). (Author's collection)

'though each post was feeling increasingly isolated' (Davies-Scourfield 2004: 43). On Rue de Victoire, Sandford was feeling troubled: 'All I could do was build a low barricade from the rubble ... Dense clouds of smoke rolled over the town and all round the houses were burning fiercely. Along the main road, in the direction of the canal bridge, I could hear rifle and machine-gun fire from where the last few remaining riflemen were manning the barricade of burnt out vehicles'; he had 'five rounds left in my rifle and I waited and waited for the Germans to break through wishing that my platoon was at hand to help me' (quoted in Buck 2013: 15:10).

In the German command post the mood was still subdued, but Fischer later reported that 'the brigadier and the artillery commander remain optimistic ... soon it becomes apparent that casualties are low' (quoted in Cooksey 1999: 129); Fischer described how after 'a discussion with the artillery commander, another concentrated bombardment is ordered, to be followed immediately by a renewed attack' (quoted in Guderian 1990: 161). At 1240hrs, Guderian arrived in person and asked Schaal to report by 1500hrs whether the town could be taken that day; if not the attack would be stopped and the Luftwaffe called in the next day, Monday 27th. Schaal sent his operations officer forward, along with his intelligence officer, to urge his *Schützen* commanders forward.

Miller prepared for a final withdrawal and made a reconnaissance of potential positions; he could not reach Nicholson in the Citadel because the entrance was swept with machine-gun fire, or contact 1st RB – by now in the Gare Maritime – because German machine guns in the Hôtel de Ville interdicted movement across the bridge into their area. Accompanying Miller was Capt E.A.W. Williams, the adjutant, who later described the deteriorating situation: 'The whole time we were running out of sleep and fatigue was extremely strong. We had just enough supplies to keep ourselves alive during that time but re-supply was nil of course and the whole thing gradually started crumbling' (quoted in Buck 2013: 15:16). Miller decided to move back to the main square and cathedral with the intention of holding out until dark.



2/Lt Williams, because he 'took a bit of a blast' (Williams: 15), was recovering in the post office when the withdrawal order was received by runner. Pardoe heard by radio; at 1300hrs, with the British rearguard in Bastion 11 completely surrounded, he escaped and established what was left of C Company in a large house on the Boulevard des Allies. Poole had not retired because orders had not reached him. Miller, realizing B Company had failed to move, went with 2/Lt Dick Scott to see Poole. The two officers were separated and Scott continued on. Scott was shot in the street by a sniper as he was shouting to Davies-Scourfield in B Company HQ and staggered forward to fall dead into his arms.

By now many houses could not be used as defensive positions because they were on fire and 'All that it had been possible to do really was to man barricades of debris across the streets ... and to re-occupy a few upper rooms'; such barricades were 'no obstacle to tanks at all. Several of these now began to work slowly along the streets through B Coy and HQ area and make all available communication very difficult by halting at road junctions' (Miller: 58). Despite the ban on employing armoured vehicles in built-up areas, the Germans used PzKpfw II tanks to cover the flanks of advancing *Schützen*, and PzKpfw III and PzKpfw IV tanks to support them directly. Cpl Day of 1st QVR noticed that, when not accompanied by tanks, German infantry were 'hidden in houses as we were', and found in such an environment 'the least you expose yourself the better it is for yourself'; he told how he 'never had any training in street fighting. It was mostly self-preservation ... Nobody wanted to be a hero' (quoted in Buck 2013: 15:21).

Sandford made it to Quai Paul Devot from where only the cathedral spire and clock tower – shown here – were visible because 'every street was on fire' (quoted in Buck 2013: 15:29). At 1630hrs, a few Germans dashed around a nearby building and a stick grenade landed close by. Sandford was dazed and made prisoner; four others were killed and three wounded by the blast. A German officer incredulously asked Sandford, 'Why do you fight us? You are very brave, but foolish' (quoted in Cooksey 1999: 137). (Bundesarchiv Bild 146-1972-050-11 Foto: o. Ang)





Defending Calais

On the morning of Sunday 26 May, barricades of burnt-out trucks and sandbags continued to block roads into Calais-Nord. By 1130hrs the Germans had established themselves behind those on the three bridges and were targeting roads that led off them. Here, the barricade set up to stop access onto Place de Richelieu is receiving German fire straight down the road from Pont Georges Cinq. The Germans are attempting to cross over to the left side of the road because on their side a hotel occupied by 2/Lt Williams is proving difficult to

overwhelm. The roadblock across the bridge, which has been breached, is visible in the background. German figures, with a tank, are moving through the gap. A couple of German soldiers are dashing across the street covered by an MG 34. Maj Cromwell, who has been hit by sniper fire, is manning a Bren gun and giving instructions to an anti-tank rifle team looking for a good firing position. Soon, with only three riflemen left standing beside him, Cromwell will be compelled to withdraw to Rue des Maréchaux.

Sandford was behind a small roadblock formed from debris, and observed German infantry close by. His 'infantry training and sense of duty kept me at my post' and he fired four of his five rounds before a tank rumbled up to join the *Schützen*, who had now taken cover; then 'a German officer came up to the tank and I could hear him giving orders. I decided then and there to fire my last round at that German officer and make a hurried exit' – he took his shot and was just about to turn into a side street when 'a tank gun shell exploded ... The blast swept me off my feet ... finding that I was unhurt by the shell I climbed over a heap of rubble and continued my journey' (quoted in Buck 2013: 15:21).

In B Company's sector, 'Desolation now reigned' and machine guns were 'chattering away and shells exploding'; Davies-Scourfield went to see Poole who had told him to 'make sure I know what's happening' (Davies-Scourfield 2004: 45). 2/Lt Martin Willan, commanding 8 Platoon, had been killed and Finlayson now led 6 and 7 platoons; Sgt R.J.C. Balchin commanded 8 Platoon. News eventually arrived that B Company was surrounded, and Poole set off to find Miller. Finlayson thought that Poole had been killed and also set off to find Miller, leaving Davies-Scourfield in charge. German infantry were reported to be behind them so Davies-Scourfield started to move HQ personnel to his platoon's location in the Quai de la Meuse, which had been reinforced by a platoon from 1st QVR. He dashed off, but because the street outside was under heavy fire his party could not follow him. He was soon isolated and after being hit lost consciousness.

Meanwhile, Sandford discovered Maj Trotter in a 'small yard with four riflemen and one of them had a Boys anti-tank pointing through a large hole in the wall which had been blasted by a mortar bomb. The other three riflemen stood on some ammunition boxes with their rifles resting on the high wall' (quoted in Buck 2013: 15:21). He went to the basement where some wounded were taking shelter and found some anti-tank rifle rounds, which he took upstairs. No rifle ammunition was available so he returned to help the casualties. Later, when a German tank was heard approaching, Sandford found the firing position deserted; determined not to be captured, he took the wounded out of the house and found a medical aid post. He then joined a section retreating to the seafront in a damaged truck. Once there they made their way along the shop fronts, dashing between cover, towards the docks.

Schaal thought the Citadel was the most important objective and gathered his forces for another push. Fischer reported 'There is a break in the fighting.



The exhausted assault troops gather their strength, and when the new attack begins at 14.15 hours after a short but effective bombardment, ground is soon gained' (quoted in Guderian 1990: 161). By 1500hrs, the Citadel was surrounded and the south gate forced. The Germans burst through into the fort's interior and Nicholson was captured.

The men of 2nd KRRC gathered around the Place d'Armes. There was to be no final stand. At 1600hrs, Miller ordered the battalion to scatter. He told Poole to 'break up into small parties, hide up and try to get away through enemy lines' (Davies-Scourfield 2004: 48). Davies-Scourfield regained consciousness and stumbled into a hut, where in the evening a German soldier found him. The German 'replaced my field dressing with his own which he tied round my head' (Davies-Scourfield 2004: 50) and said that help would arrive; the next morning he was made a prisoner of war. In total, 192 men of 30th Infantry Brigade were recorded as killed in action or died of their wounds.

When Churchill attributed the Dunkirk evacuation to the defence of Calais, Pardoe finally 'realised what we'd achieved' (quoted in Levine 2010: 124). Fischer wrote 'It was a hot, bitter struggle to take this fortress'; he described how 'Tenaciously the fort had been defended – even more tenaciously our Rifle Regiments had fought ... determined to gain their end' and thought the British must have 'knew the worth of Calais in all its importance, and therefore the loss of the town must be more grievously felt' (quoted in Cooksey 1999: 138). On 27 May, Guderian could not attack across the Aa Canal because his Panzer divisions were scattered due to recent battles. Instead, 10. Panzer-Division rested prior to the next phase of the campaign.

The devastation caused by the German bombardment is evident in this picture of Calais taken after the surrender. Some 24 15cm guns and 12 21cm guns from the artillery of XIX. Armeekorps (mot.) (available from late afternoon on 24 May), in addition to 48 barrels from 10. Panzer-Division's artillery regiment and 100 *Stukas* from Stukageschwader 2 and 77, contributed to the destruction. L/Cpl Doe described the bombardment as 'never ending ... it was constant shelling' (quoted in Buck 2013: 15:6). (Bundesarchiv Bild 101-383-0337-11 Foto: Böcker)

Merville

27 May 1940

BACKGROUND TO BATTLE

After the German invasion 6th King's Own, attached to 2nd Division and commanded by Lt-Col Norris, had moved to Lessines in Belgium on 12 May, but by 18 May the battalion was transported back to the Escaut Canal at Cysoing. A move to Erquinhem behind the Lys Canal followed, which the

On 24 May, SR 3 was first tasked with taking the crossing over La Bassée Canal near Robecq. Combat engineers began to build a bridge, like the example depicted here, but a temporary halt order arrived and work stopped. Hauptmann Walter Barth, the intelligence officer, recorded that most of his colleagues thought a British armoured attack was imminent. (Bundesarchiv Bild 146-1969-125-75 Foto: o. Ang)





battalion reached on 22 May. Once the decision to withdraw in bounds to Dunkirk had been made, an operational scheme to use canals as defence lines and villages as strong-points was developed. The flanks of the Dunkirk perimeter were to be securely held, enabling troops deployed further south to make the retreat. Maj-Gen Sir H.C. Loyd's 2nd Division stood on the western flank along La Bassée Canal; nearly perpendicular to it was the Lys Canal, designated a blocking position on the way to Dunkirk. On 23 May, 6th King's Own was assigned the defence of various crossings over the Lys Canal from Panzer divisions approaching from the south-west: C Company at Aire, B Company at Saint-Venant, A Company at Merville, and D Company at Estaires. These villages were fortified to the best of their ability with roadblocks placed across the main thoroughfares.

The British battalion's adversary at Merville on 27 May would be III./SR 3, which during the Polish campaign had been I./IR 69, serving in 20. Infanterie-Division (mot.). The German battalion, commanded by Major Hans Kratzenberg, had the same organization as an *Infanterie-Bataillon (mot.)* with the addition of a *schwere Kompanie*, and unlike I./SR 3 and II./SR 3 did not have a *Schützen-Kompanie* mounted on motorcycles.

On 13 May, Hauptmann Ferdinand Schneider-Kostalski, commander of 2./PzRgt 6 (3. Panzer-Division), encountered roadblocks defended by French anti-tank guns and infantry in Orp-le-Grand in Belgium. There, despite having his tank knocked out, he forced his way through and stormed across a

Kratzenberg's machine-gun company had eight MG 34s and six 8.1cm mortars, and his *schwere Kompanie* an infantry-gun platoon (two 7.5cm howitzers), an anti-tank platoon (one MG 34 and three 3.7cm anti-tank guns) and a combat-engineer platoon (three MG 34s). On the Dyle, he gave each *Schützen-Kompanie* a machine-gun platoon, a mortar section, an infantry gun and an anti-tank gun. Here, in May 1940, a 7.5cm howitzer is visible. The 7.5cm leIG 18 weighed 400kg (880lb) and relied on a motorized transport. A crew of five could manhandle the gun only short distances; 8–12 rounds could be fired per minute out to a range of 3,550m (3,880yd). There was no British equivalent. (Bundesarchiv Bild 1011-769-0236-25 Foto: Borchert, Erich (Eric))



At 1500hrs on 26 May, a troop of 18/25-pdr guns, inadvertently detached from their battery, arrived in Merville to assist 6th King's Own. Their use against tanks in the direct-fire mode, was illustrated when Schneider-Kostalski attacked. (Cody Images)

wooden bridge over the River Gette. Oberleutnant Graf zu Dohna's tank disabled three anti-tank guns and brought in 150 prisoners. III./SR 3 reached the village shortly after and crossed the river at 1530hrs. Enemy tanks forced Kratzenberg to take up defensive positions, but the battle was decisively won by the Panzer brigade. Boldness in the attack had been taught to Schneider-Kostalski, and experience seemed to be proving the doctrine. On 15 May,

This photograph was taken from the road intersection north of the northern bridge over the River Lys, and the Rue des Capucins that runs east parallel with the northern bank is shown. Buildings on the right-hand side of the road, which included a school, were occupied by soldiers of 6th King's Own to defend the canal line. Merville was completely destroyed during World War I and rebuilt during the 1920s. (Author's collection)





Kratzenberg was similarly successful at Ernage along the Dyle. When the regiment's attack on these more formidable Belgian-border frontier defences bogged down, his battalion was called up from reserve. Each company was allocated a tank platoon and overall the combination of armour and infantry achieved good results. Kratzenberg was awarded the Knight's Cross. He then followed PzRgt 6 to Cambrai before the division turned north-west towards La Bassée Canal.

6th King's Own was also tested prior to Merville. On 25 May, B Company at Saint-Venant withstood mortar, machine-gun and rifle fire from the SS-Verfügungs-Division. That evening, 2/Lt W.M. Skaife d'Ingerthorpe, the only officer present, supervised B Company's withdrawal, which was covered by PSM M. Hartnell's platoon. Cpl H. Stewart fired his Bren gun under heavy fire and when three tanks attempted to cross a canal bridge, Pte C.G.M. Longyear held them up with his anti-tank rifle. Despite his gun malfunctioning, he cleared his weapon and continued to fire until the tanks withdrew. Fortunately, not many had pushed through along the south bank of the Lys, and 6th King's Own could concentrate in Merville. Saint-Venant was later recaptured by 2nd Division's 6th Brigade.

On 26 May, I./SR 3 took Robecq on La Bassée Canal despite stubborn resistance from 6th Brigade and on the next day, despite worsening weather, the regiment prepared a rapid advance across the Lys at Saint-Venant and Merville. Saint-Venant was the objective of I./SR 3, supported by I./PzRgt 5. Kratzenberg's battalion was given the furthest village, Merville, as its objective and joined a *Kampfgruppe* commanded by Oberstleutnant Günther von Manteuffel that included I./PzRgt 6, I./AR 75 and PzJgAbt 39 (minus 3./PzJgAbt 39). All that stood in their way was 6th King's Own.

In 1936, Ju 87 Stuka units were created to deliver ordnance accurately on targets given by air-liaison personnel. When Stukas attacked near Arras on 21 May, Pte Bert Davies of 6th DLI wrote: 'You felt so helpless ... you can't retaliate to them, you lie down and take it. It was pretty disheartening' (quoted in Moses 1995: 136). Here, in May 1940, pilots are briefed about the next sortie. (Bundesarchiv Bild 101I-383-0338-03 Foto: Stift)

III./SR 3 and 6th King's Own at Merville, 27 May 1940

MAP KEY

1 0900hrs: Tanks of Hauptmann Schneider-Kostalski's 2./PzRgt 6, including Oberleutnant von Brodowski's medium-tank platoon of 4./PzRgt 6, advance into Merville carrying elements of Oberleutnant Werthern's 11./SR 3. Feldwebel Wolf's tank platoon approaches from the south-east, and Brodowski and Graf zu Dohna's tank platoons through the south-western outskirts.

2 c.0920hrs: Leutnant von Winterfeld's tank reaches the railway crossing and is destroyed by an 18/25-pdr gun situated near the war memorial; Werthern's men are taken under fire and dismount from the tanks. Within the hour, he is forced to withdraw.

3 c.1020hrs: Werthern's men withdraw, covered by the recently arrived 1./PzRgt 6.

4 1130hrs: Following an artillery barrage, Kratzenberg attacks across the railway embankment with 11./SR 3 and

Hauptmann der Reserve Sturm's 13./SR 3 against the village, each *Schützen-Kompanie* supported by tank platoons.

5 Midday: Sgt Mason is in charge of the southern bridge's defence; Pte Longyear and Pte Callaghan drive off a combined tank/infantry assault with anti-tank rifle and Bren gun, respectively. However, shortly afterwards the bridge is taken by the Germans and an infantry battle develops in the centre of the village.

6 Early afternoon: With no further progress made against the northern bridge, Kratzenberg reinforces with 12./SR 3 to form a cohesive front, but no further progress is made and by late afternoon the German attacks tail off.

7 2030hrs: Capt Dixon covers the British withdrawal across the northern branch of the canal; 2/Lt Skaife d'Ingerthorpe has to swim across because the bridge has been destroyed.

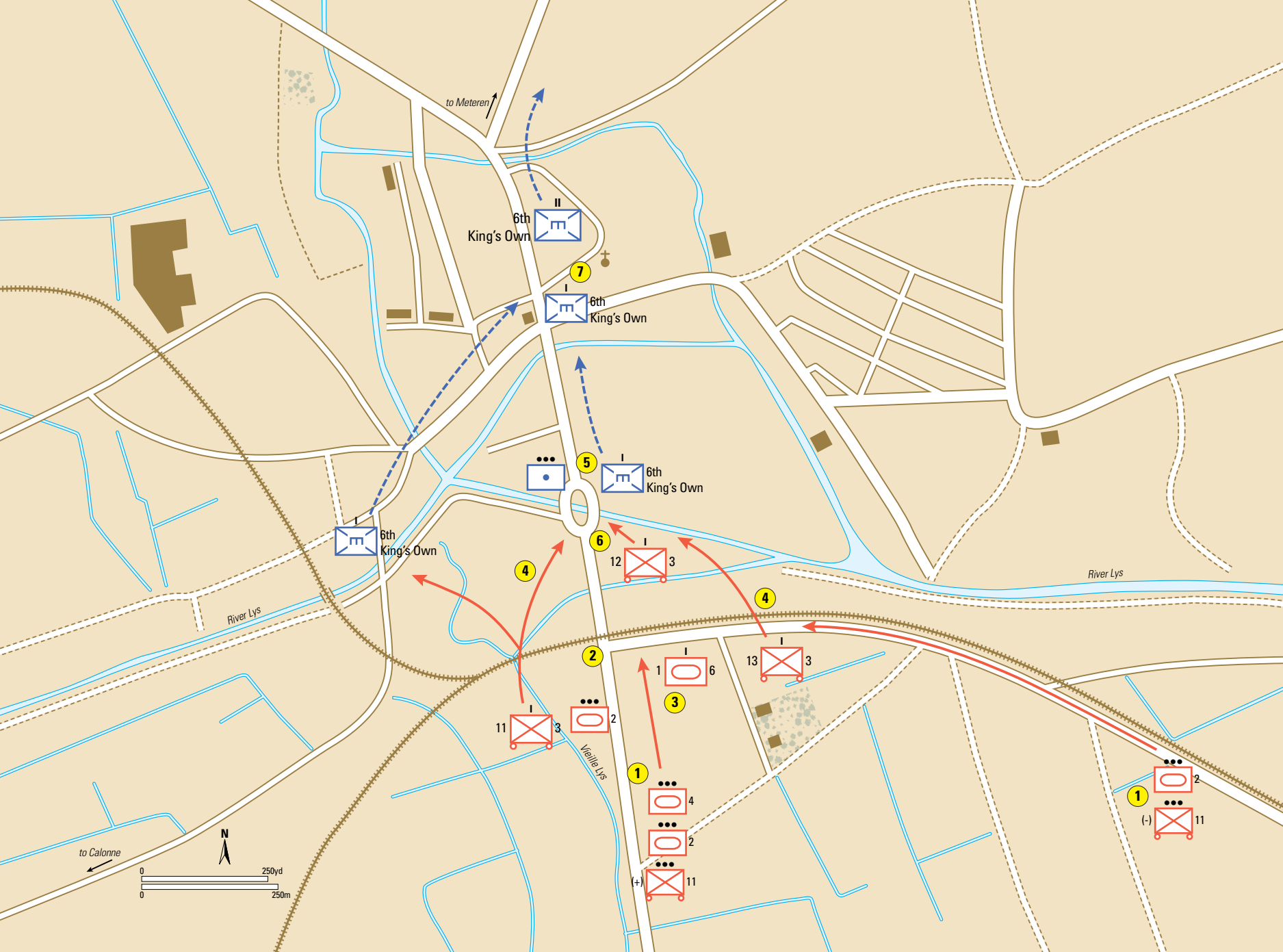
Battlefield environment

Merville lies along the Lys Canal and is surrounded by many drainage ditches. As the Lys enters the village from the south-west it splits into two branches before rejoining to the south-east of the village; there is a bridge on each of the branches, the southern being a lock gate in a more open area with gentle grass banks and a road running beside, and the northern a drawbridge in a more built-up area with buildings by the canal side. A small tributary called Digue

de la Clarence, which joins just before the southern branch rejoins the northern branch, meanders south-east out of the village. The Hôtel de Ville, village square and Eglise Saint-Pierre north of the northern bridge helped the defenders. A railway approaching from the south-east that terminated in sidings and railway buildings south of the canal gave vehicles on the parallel road good cover up to the main north-south thoroughfare through the village.



The Lys River runs 88 miles from La Bassée Canal near Aire through Saint-Venant, Merville, Estaires and Sailly to Ghent in Belgium. The Hôtel de Ville in Merville, shown here, was inaugurated on 7 April 1929 and was an important strongpoint for the British defenders, standing north of the northern branch of the River Lys that flowed through the village. (Author's collection)



INTO COMBAT

On the morning of Monday 27 May, Kratzenberg led with 11./SR 3 and 13./SR 3, and kept 12./SR 3 and his Pionier-Zug in reserve. Schneider-Kostalski's 2./PzRgt 6 was attached – Oberleutnant von Brodowski's medium platoon (attached from 4./PzRgt 6) and Feldwebel Höhe's platoon supporting 11./SR 3 and Oberleutnant Graf zu Dohna's platoon assisting 13./SR 3. Leutnant Falkenthal, Leutnant Schneider and Wachtmeister Fritz, from I./AR 75, acted as forward artillery observers. Leutnant Kramm from PiBtl 39 with a combat-engineer party was available to find a suitable site for a pontoon bridge, if required.

A Stuka attack on Merville planned for 0745hrs was cancelled because of poor visibility, but heavy shelling was experienced in the village. The German ground attack started at 0800hrs. I./SR 3 was preoccupied with taking Saint-Venant for the rest of the day but further south no British forces could challenge German tanks from Kampfgruppe *Manteuffel* moving towards Estaires, and 7th King's Own, deployed on the north bank of the Lys west of Merville, had a clear view of them. Kratzenberg followed in their wake and initially made good progress, occupying Calonne within the hour, but from then on the many drainage ditches slowed movement; the *schwere Kompanie* had particular difficulty. At 0900hrs Hauptmann Schneider-Kostalski arrived and a decision was made to mount a few men from Oberleutnant Thilo Freiherr von Werthern's 11./SR 3 on his tanks and drive straight into Merville. While Brodowski's and Graf zu Dohna's tank platoons slowly advanced towards the south-west outskirts, another under Feldwebel Wolf moved in from the south-east.

In Merville, 6th King's Own observed a couple of tanks moving north-east towards them south of the canal from Calonne, but before they arrived a column of eight medium tanks was seen approaching on the road from the south-east that ran beside the railway. It was hoped these tanks were Allied and would engage the tanks approaching from Calonne; however, they belonged to Schneider-Kostalski's 2./PzRgt 6 and an engagement occurred at close range. A towing tractor from the detached artillery troop, situated south of the canal, was hit and set alight by a tank's machine gun, but a 18/25-pdr situated where the war memorial stood replied and knocked out the lead German tank (belonging to Leutnant von Winterfeld) near the railway crossing, approximately 165yd south of the bridge, sending the turret high into the air and swinging the vehicle around so that it blocked the road. Gunfire from British machine-gun positions in the upper storeys of the houses forced Werthern's men off the tanks in search of better cover. Armed with a Bren gun, Pte Callaghan cleared a house where a German section sought refuge. After another German tank was destroyed and a couple of others were damaged, Schneider-Kostalski decided to pull back, taking the survivors of 11./SR 3 with him. The recently arrived 1./PzRgt 6 covered the German withdrawal.

Kratzenberg took over and formed his battalion up for an infantry assault. After an artillery barrage from I./AR 75, at 1130hrs 11./SR 3 was again committed, from south of the railway embankment, this time supported by 13./SR 3; the southern canal bridge was taken and the *Schützen* entered the centre of the village, but here their attack bogged down in street fighting.



Schneider-Kostalski's tanks could make little impact in the narrow streets and the *Schützen* soon went to ground. 13./SR 3 lost contact with 11./SR 3 and 13./SR 3's commander, Hauptmann der Reserve Dr Sturm, was hit and died shortly after. 12./SR 3 was pushed into the line to prevent the other companies from being isolated.

During the German attack Lt-Col Norris led from the front and organized many counter-attacks. Sgt G. Mason with a couple of sections was responsible for holding the southern bridge. Here, Pte Longyear held up approaching tanks with his anti-tank rifle, despite being wounded. Pte Callaghan, also wounded, continued to fire his Bren. Because each platoon had only a single Bren gun and anti-tank rifle, a lot rested on the men that fired them. Ammunition to them and other forward troops was carried up by company runners under the instruction of CQMS W. Bosward; these men were exposed to machine-gun and mortar fire while moving to the front. With the northern bridge in danger, the drawbridge was pulled up and explosives laid on the structure. Capt B. Dixon, OC A Company, led a counter-attack that captured 20 prisoners. Skaife d'Ingerthorpe from B Company, in an exposed position between the branches of the canal in the south-west of the village, endured the full force of German tank and infantry fire; that evening he had to swim the canal during the British retreat because the bridge over the northern tributary had been blown up.

By late afternoon, Manteuffel decided to wait for other units to encircle Merville and called off further attacks on the village. During the day SR 3 had suffered 89 casualties. A German bridgehead had been established over the Lys further west at Le Sart and a pontoon thrown across, enabling the rest of the division's Panzer brigade to move over the canal; however, the weather worsened and the progress of the tanks was limited. KBtl 3 made contact with Kratzenberg at 1845hrs, but at 2240hrs he was told to pull back from Merville.

Norris also decided to withdraw. At 2030hrs, the British battalion, covered by Dixon, pulled out and reached Meteren at 0400hrs next morning; at 1300hrs the men of 6th King's Own marched through Bailleul to Poperinghe and were then transported on trucks to Dunkirk for embarkation.

The 14.5mm Boys anti-tank rifle, weighing 35lb, was described by 2nd KRRC's adjutant, Capt Williams, as 'a long walking stick which fired rather a heavy bullet. It would have stopped an elephant but in fact wasn't very good at stopping a tank' (quoted in Buck 2013: 1:16), and it could actually penetrate 23mm of armour at 100yd. 6th King's Own was a pioneer battalion that lacked the support weapons of infantry battalions. Each platoon was assigned a single Bren gun and anti-tank rifle. The battalion was formed in February 1940 to assist with the construction of defence works and joined the BEF in April. (Neil Grant)



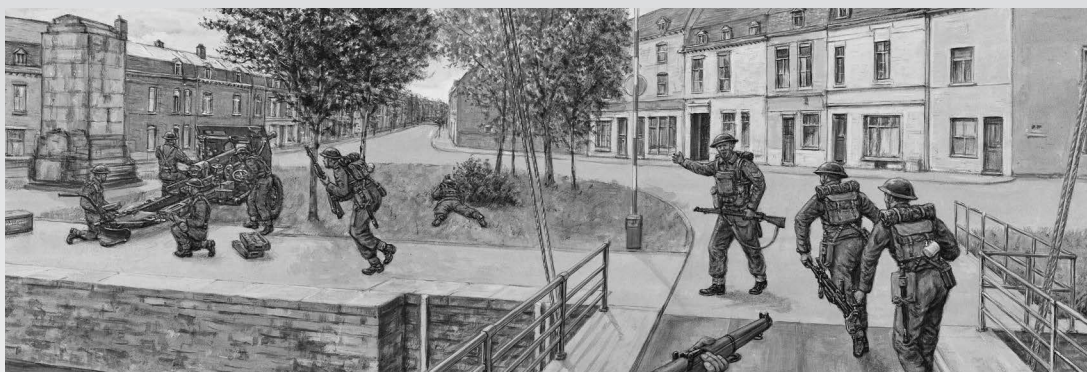


Clash at Merville



German view: This artwork depicts the moment when tanks belonging to Schneider-Kostalski's 2./PzRgt 6 with *Schützen* from Werthern's 11./SR 3 entered Merville. *Schützen*, fired at from near the southern canal bridge, have hastily dismounted from a PzKpfw II they had been riding into town from the south-east. The tank has edged

out of the line of sight of a British field gun observed near the bridge and the section leader, equipped with a MP 38, is standing behind the tank's tracks and giving instructions to an MG 34 team that has already scrambled off the next tank. Another rifleman, hit by Bren-gun fire, lies up against the tracks.



British view: The tank column approaching from the south-east has been identified as hostile and a British section helping to guard the lock and bridges across the southern tributary of the Lys Canal is deploying to assist an 18/25-pdr gun set up beside the war memorial. Already across the bridge, a Bren-gunner is firing down the main road running north to south through Merville at the riders

of a PzKpfw II that has appeared from behind the railway buildings, approximately 165yd away. A Boys anti-tank rifle team is about to cross the canal, under the direction of the section corporal. The dash into Merville by the German tank column has been a surprise, but the men of this British section have quickly readjusted their positions.



German orders for Tuesday 28 May were to head further north to high ground near Bailleul. At 1000hrs a German patrol tentatively approached Merville and found the village deserted; however, the northern bridge had been rendered unusable and combat engineers began to build another. Rain again set in, forcing the infantry to march on foot through mud. At 1330hrs, the division was mistakenly informed to expect a British counter-attack and transitioned to the defence. That evening the divisional commander, Generalleutnant Horst Stumpff, at last announced plans for an attack from Merville the next day. At 1100hrs on Wednesday 29 May, Kratzenberg advanced to Le Douliou without encountering any resistance, but at 1645hrs halt orders were received and 3. Panzer-Division rested before redeploying for the advance across the Somme.

The Merville engagement was indicative of the tendency of Panzer commanders to race ahead without sufficient support from *Schützen*, who had to dismount from trucks away from the battlefield. Co-ordination proved problematic as not all German tanks had radios that could transmit as well as receive in 1940, and they were not on the same net as those belonging to *Schützen* commanders. Carrying *Schützen* into battle on board tanks helped mitigate communication concerns, but small, early-war tanks could transport few – and, like the men of Werthern's company, they were very vulnerable. By the time Kratzenberg moved up all his companies, the initial impetus of the attack had faltered. The deployment of the *Schützen* battalion's *Schwere-Kompanie* was cited in doctrine as the most effective way to deal with anti-tank weapons, but their use at Merville is not described in any source, in contrast to their distribution to the infantry companies during the attack on the Dyle position.

At Merville, a medical aid post like this one was manned by the battalion surgeon, Oberarzt Koch, and tended to the many wounded. Along with an assistant, and medical NCOs and privates, he carried dressings and medicines in a car to implement first aid. Evacuation to the medical battalion followed where a surgeon was available. (Bundesarchiv Bild 101I-054-1531-11 Foto: Eckart)

Analysis

LESSONS LEARNED: THE GERMANS

The campaign had starkly illustrated how the Heer better appreciated the supporting arms within Panzer divisions, but lessons had to be learned to ensure a correct balance. After the Polish campaign each motorized-infantry division lost three rifle battalions, which went to strengthen *Schützen* brigades in the original Panzer divisions. With these larger brigades, Panzer divisions were better able to deal with enemy strongpoints in broken terrain. *Schützen* battalions assisted by combat engineers and field artillery could make river crossings without much tank support. However, the 1940 campaign exhibited limitations as well as strengths. Opportunities to secure decisive strategic advantage were sometimes taken, but some commanders, mindful of losses already accrued and the future challenges ahead, were cautious when dealing with the BEF pocket forming around Dunkirk, a mindset arguably proven by the subsequent losses suffered when Panzergruppe *Kleist* assaulted across the Somme in June 1940.

Oberst Friedrich Kühn, Panzer-Brigade 3 commander, described ‘the absolute superiority of the Panzers in totally crippling the enemy motorized infantry so long as anti-tank guns weren’t available’ (quoted in Jentz 1996: 132). However, the limitations of German tank weaponry were acknowledged; the 3.7cm HE round fired by the PzKpfw III and PzKpfw 38(t) did not have ‘a high fragmentation effect against live targets’, and in urban environments the PzKpfw II’s ‘machine guns and 2 cm were almost worthless’; only the PzKpfw IV’s 7.5cm gun was considered ‘especially useful for combating targets under or behind cover (machine gun nests, mortars, anti-tank guns)’ (quoted in Jentz 1996: 42), but at this stage the tank had relatively thin armour, which made it inappropriate for the initial attack on enemy infantry positions.

Although the Wehrmacht was strategically successful, there were tactical failings. The Panzers’ vulnerability in urban areas was highlighted by the



attack on Calais. In contrast to the impetuous advance of the armour at Merville, entering a city like Calais was acknowledged as a different situation entirely. The armoured vehicles attacking Davies-Scourfield's men on the outer perimeter displayed a marked reluctance to close with the British, despite the early destruction of the roadblock and anti-tank guns. British use of the Boys anti-tank rifle made the attackers cautious. At the inner perimeter the PzKpfw I demolition tank failed to destroy the roadblocks. Similarly, while the self-propelled 15cm sIG 33 infantry gun could prove devastating against buildings, because the gun was mounted on the hull of a PzKpfw I, deploying it safely in built-up terrain like Calais precluded more effective use. Rather, artillery in the direct-fire mode was used to blast the obstacles on the canal bridges. Once in the old town, German infantry had the full support of their tanks, despite the OKH directive that forbade their use in such an environment. British anti-tank defences were by then almost non-existent and the machine guns on the tanks were effective mobile support weapons for the *Schützen*. The Germans were not necessarily better trained to operate in the urban environment; rather, the availability of tanks as mobile gun platforms made them less cautious than their British counterparts, who by then had lost what armour support had been available.

Schützen also found they were at a disadvantage when confronted with British tanks, because the 3.7cm anti-tank gun's AP round was not able to destroy a British infantry-support tank, and the consequences were more serious in open countryside. At Arras, after the British tanks had disorganized German infantry that had no armour support, British infantry were able to take villages defended by *Schützen*. A more serious defeat was only averted because the British force was not able to call down counter-battery fire against the German gun line. The Germans discovered that a balanced all-arms force

During the *Stuka* attack on Calais, 2/Lt Philip Pardoe of 2nd KRRC 'watched fascinated. They were almost overhead when, one by one' the aircraft dived 'perpendicular and, as it seemed, straight for our positions, omitting a terrifying wail'; after releasing 'their bombs, which could be seen clearly', it seemed 'they might crash into the ground', but 'straightened up ... and soared serenely back into the sky ... while their bombs exploded with a deafening roar, throwing up clouds of debris unlike anything I had ever seen before' (quoted in Buck 2013: 15:7–8). In 1940, close air support could, when used against poorly trained troops, create panic, but the physical destruction caused was often described as limited. However, later in the war, payloads would increase and fighter-bombers in particular would target unconcealed troops and armoured vehicles very effectively. (Bundesarchiv Bild 1011-318-0053-35 Foto: Koll)



Rommel's operations officer, Oberstleutnant von Bernuth, highlighted the importance of having a couple of bridging columns for river crossings and stated pneumatic rubber boats should be directly available. If Kratzenberg had possessed them at Merville, the focus of the battle need not have been on the bridges over the Lys Canal. Here, in May 1940, a 3.7cm anti-tank gun and its tractor are being ferried across a river on a pontoon and boats are carrying motorcyclists. (Bundesarchiv Bild 146-1980-018-09 Foto: o. Ang)

that could deal with multiple threats was needed, but in the short term were making the same mistakes, as the attack across the Somme would show.

Kühn reflected on the assault on Merville; he realized 'Panzers are not suitable for combat in the woods and cities', but misread the strength of the defences there by trying to explain the failure to the fact that British 'anti-tank guns could not be located when mounted in basement windows and positioned in rooms. Panzers were practically defenceless against such guns during street fighting' (quoted in Jentz 1996: 132). The few *Schützen* that could be mounted on the tanks were simply not enough to counter fire from the British positions, which were much weaker than he thought. The intervention of the British 18/25-pdr troop proved decisive in repelling the initial advance. Kratzenberg's *Schwere-Kompanie* was stuck in the mud and not yet available. The challenge was to deploy the company where it was most needed and communication failings, exacerbated by officer casualties and difficult battlefield conditions, hampered the Germans' ability to do so.

LESSONS LEARNED: THE BRITISH

In May 1940, the British, despite a series of War Office pamphlets explaining their adversary's operational technique in Poland, failed to appreciate the threat posed by the Wehrmacht. Although a report in 1940 from IV. Armeekorps described the British soldier as 'in excellent physical condition ... tough and dogged ... a fighter of high value' (quoted in Gudmundsson & English 1994: 103), poor co-ordination of different arms prejudiced offensive



A knocked-out A13 in Calais. During that battle, Capt Ironside's A13 was badly damaged when the turret, traversing to the left, crashed into an electricity pylon, because the driver was still driving on the left side of the road. As late as 1942, the Germans still reported the British showed 'no close co-operation between infantry and armoured formations; the tanks followed up very slowly and were not nearly quick enough in exploiting successes gained by the Lorried Infantry' (quoted in French 2001: 6). Such assessments may have been deliberately downplaying their opponent's merits, but the British regimental system may have prejudiced combined-arms co-operation. New Zealand infantryman Major-General Sir Howard Kippenberger, appointed official war historian for New Zealand, wrote of 'a most intense distrust, almost hatred. Everywhere one heard tales of the other arms being let down; it was regarded as axiomatic that the tanks would not be where they were wanted in time' (Kippenberger 1949: 180). (Bundesarchiv Bild 146-2005-0066 Foto: o. Ang)

potential. Furthermore, decision-making processes could not keep pace with the speed of the German offensive. Brig (later Lt-Gen) Sir Oliver Leese, the BEF deputy chief of staff, explained how the 'moves the Germans made were so quick and where you may have a stable situation in the morning, by 7 o'clock or 8 o'clock in the evening, if you did not act and do something, the situation might be irretrievably lost' (quoted in French 2001: 178).

Rather than being schooled in tactical decision-making, company commanders continued to be taught to follow predetermined battle drills, but manuals could not cover every possible scenario. 2nd KRRC was among the few battalions better able to organize and fight as befitted the task, despite the loss of communication equipment that led to leaders being absent from their platoons at key times. The urban battlefield at Calais made the men fight what Davies-Scourfield described as a 'soldier's battle', by which he meant that for the individual soldier, little else seemed to matter beyond the immediate vicinity of his house or crossroads. This approach was exacerbated by communication difficulties. Each platoon had a radio, but nearly all had been 'destroyed or damaged beyond repair' (Davies-Scourfield 2004: 41). Company commanders were keen to be kept informed of the situation and junior officers often reported to them directly; however, the consequences of so many officers assembling in a single location could be dire. For example, on the morning of 26 May, Davies-Scourfield went to company HQ to find out what was going on and watched as 2/Lt Dick Scott brought a truck up to evacuate the wounded Capt Henry Scott. The truck was riddled with machine-gun fire and when Poole ordered Dick to take cover in the HQ, the Germans, 'astonishingly quick and accurate with their mortars' (Davies-Scourfield 2004: 42), targeted the site with bombs. They ran to the garden, but a round landed among them. Luckily, this time, all survived, and Dick Scott and Davies-Scourfield rejoined their platoons. Only because 2nd KRRC was trained to operate independently in small groups were they better able to tolerate the temporary absence of their officers.

Only in 1942 did the British motor battalion start receiving medium machine guns; here, British soldiers pictured in that year appreciate the merits of the German MG 34 mounted on a tripod. By July 1942, more scientific selection methods matched each recruit with a branch of service, a reform Lt-Gen Ronald Adam, the Adjutant-General with responsibilities for organization, personnel and training, hoped would ensure infantry no longer 'received in effect the rejects from other arms of the Service' (quoted in French 2001: 70). Officers were also more carefully selected. The KRRC established a Colonel-Commandant's Office to spot potential officers before call up, and from May 1941 a Motor Wing at the OCTU looked out for suitable candidates. From 1942, the War Office Selection Board, based upon the German system, tested applicants in stressful situations, and a specialist Motor OCTU was created, next to the Motor Training Battalion. Officers received better training; in 1942, time spent on tactics increased. Man-management also improved and helped maintain morale. Battle school exposed infantry to battlefield conditions, but infantry personnel shortages persisted because so many soldiers were allocated to the supply services. More important was the increase in ratio of armour to infantry divisions to 1:3, which made more tanks available to support the infantry than in the Heer. (© IWM E 10963)



Although the British lacked specialist training, infantry/tank co-operation was successfully extemporized at Calais, but few lessons were brought back. Arras showed a more typical pattern of a confused command chain that had neither the training nor the signals equipment to co-ordinate offensive mobile operations. The inability to bring down indirect fire on the German artillery batteries that would do such damage to the British tanks was decisive. However, during the retreat, notwithstanding command deficiencies, defensive lines were effectively improvised, for example at Merville (albeit by pioneers with some training in building field fortifications), which – assisted by the German halt order – held for long enough to permit the evacuation of the BEF. At Merville, 6th King's Own showed what was achievable by inexperienced infantry that had few support weapons, but which defended an important location that the enemy needed to take by frontal assault.

However, after Dunkirk, progress was made by the British. Tactical training exercises organized by battle schools were more realistic and reflected the confusion of the battlefield. Len Waller described them as 'more physically arduous than anything we were to experience in true combat' (quoted in French 2001: 203). British officers were taught to co-operate more with artillery because of the lack of support weapons at battalion level. Senior officers needed to keep pace with fast, mobile operations and commanders in armoured divisions started to issue verbal rather than written orders; however, they often failed to take advantage of opportunities available in a rapidly changing battlefield because of underconfidence, and would not allow subordinates to use their initiative to seize them either. All-arms co-operation was lacking and in 1941 in Libya their tanks would again advance unsupported by infantry or artillery against German anti-tank screens. Only in 1942 would each armoured brigade have an affiliated artillery regiment; however, motor battalions were still not working closely with armoured brigades. Rather, they were often deployed in a static, defensive role, or used to harass lines of communication.

Aftermath

GERMAN

As the 1940 campaign wore on, 3. and 10. Panzer-Divisionen continued to commit tanks ahead of infantry. On 5 June, against defensive positions on the Somme, 3. Panzer-Division tanks 'moved without stopping in and over the initial enemy trenches' (Veterans 2012: 91–92), but Kratzenberg's *Schützen* battalion was held up at Estrées with over 100 wounded. A couple of artillery batteries were brought forward to fire over open sights and I./SR 3 committed to take the village. However, contact with the Panzer brigade, fighting its own battle against enemy artillery batteries, was broken and the tanks, short on fuel and ammunition, were forced to maintain all-round defence until the *Schützen* brigade closed up next day. Oberst Kühn received the Knight's Cross, but 30 of his tanks had been knocked out and on 9 June the division was pulled out of the line for 48 hours' rest.

Similarly, on 5 June 1940 Schaal led with his tanks near Amiens, which were held up by village strongpoints and artillery on the Dury Plateau. Only the next day, when the *Schützen* led the attack, were sufficient defences overwhelmed to enable a safe exploitation route for follow-on motorized divisions. Further north, Rommel had an easier time breaking out from Abbeville because his sector was not as heavily defended. Further south, across the River Aisne, Generaloberst Wilhelm List, commanding 12. Armee, used infantry divisions to make the initial attack; in most cases this was unsuccessful. Because the Allies no longer had tank reserves, however, an Allied retreat was inevitable because List's Panzers crossed the Aisne where the attacks had been successful.

While the number of APCs remained so few, vulnerability to enemy counter-attack during the exploitation phase, as experienced by 7. Panzer-Division at Arras, remained. It was mitigated in Russia in June 1941 by deploying PzRgt 25 behind rather than in front of SR 6; on 25 June, a 90-mile advance was made with this security. Officers such as Major Horst Liese,

In late 1940, most Panzer divisions formed an additional *Schützen-Regiment* (both had two battalions) and lost a *Panzer-Regiment*, which tended to lower the ratio of tanks to infantry. 10. Panzer-Division lost PzRgt 8 to the newly formed 15. Panzer-Division. 7. Panzer-Division retained both *Schützen-Regimenter* and the tanks formed a three-battalion regiment. 3. Panzer-Division was equipped for service in North Africa (in fact, only various component units – including AufklAbt 3, PzRgt 5 and PzJgAbt 39 – were sent to Libya with Rommel), and added SR 394, formed from Kratzenberg's battalion and a battalion from IR 243. Hauptmann Schneider-Kostalski commanded a new III. Abteilung for PzRgt 6, which in June 1941 had 58 PzKpfw II, 108 PzKpfw III and 32 PzKpfw IV. In February 1941, all enlisted personnel born before 1909 were transferred to the replacement battalion. Training manoeuvres prioritized *Schützen* breaching fortified positions and river crossings, and one company replaced their trucks with APCs. Combat power was maintained because mostly PzKpfw I and PzKpfw II tanks were lost; *Schützen* in APCs took their role and could also dismount to clear woods or villages. Such troops would be mandatory for successful combined-arms operations. Here, an SdKfz 251 is shown operating in Russia during June 1941 – still a rare sight, as each *Schützen-Regiment* had just a single company mounted in APCs. (Bundesarchiv Bild 101I-209-0063-12 Foto: Tannenber, Hugo)



the quartermaster, used their own initiative to solve logistical difficulties created while operating in the vast Russian steppe. On 14 July, XXIV. Armeekorps (mot.) HQ responded directly to his appeals when Soviet forces were detected approaching his supply columns, 60 miles behind the forward operational units, and sent a motorized-infantry regiment from another division to assist. With this intervention the division advanced 100 miles in the next 48 hours and got to within 125 miles of Moscow. Yet, Panzer divisions still had to wait for infantry divisions because the gaps between them could not be fully covered by the ten motorized-infantry divisions then available. SS-Standartenführer (later SS-Obergruppenführer) Felix Steiner, who commanded SS-Standarte *Deutschland* in 1940, argued another 25 were required to fill the void. Cavalry divisions, suggested by Guderian in the 1930s, would have done just as well.

BRITISH

Despite its stand at Merville, 6th King's Own would see no further combat. In mid-1940, the battalion moved to York and was given camouflaged buses for mobile anti-invasion duties. Service in Lincolnshire and Norfolk followed before disbandment in July 1944, but a nucleus formed an ITC in Ireland. More typically, 6th DLI re-formed as an infantry battalion and in May 1941 was sent to the Middle East. British equipment improved as a result of battlefield experience. Adherence to drill persisted, however, and officers recruited in wartime imposed more stringent discipline, which encouraged the typical new recruit to regard them as 'his governors rather than as his leaders' (1942 War Office report quoted in French 2001: 128). According to Peter Carrington, a Guards officer, discouraging enlisted men thinking for themselves was particularly detrimental because 'Where manoeuvre is required, so is speed



Sections were increased to ten men (permitting a separate rifle and gun group) and commanded by a corporal equipped with a Thompson submachine gun; medium machine guns continued to elude them, but six mortars were added to establishment. Shown here with a 50-round drum magazine, the M1928 Thompson submachine gun – which the War Office had been so reluctant to adopt – increased in numbers, and in 1941 was supplemented by the smaller Sten gun, which was derived from the German MP 38. (Cody Images)

and imagination and initiative’ (quoted in French 2001: 129). They constantly needed to be led by example and, as late as May 1943, an official report thought if officers and NCOs were casualties ‘the remainder do not know what to do in many instances’ (quoted in French 2001: 129). As late as 1944, a German combat unit still found that because ‘NCOs were rarely in the “big picture” ... if the officer became a casualty, they were unable to act in accordance with the main plan’ (quoted in Gudmundsson & English 1994: 116).

By late 1940, each armoured division had three instead of two motor battalions, and a motor company was often assigned to each tank battalion; however, their tasks were restricted because APCs were not available. In January 1941, during manoeuvres, an American officer observed: ‘It is not expected that the motor battalion will follow the tanks too closely into battle’; instead, the battalion was used ‘to mop up villages, woods, etc., which had been overrun by the tanks to provide a safe route for other unarmored units to move forward. Another mission for the Motor Battalion will be that of advancing to hold an important defile or bridge, through or over which the tanks are to pass. Lastly, they expect to use it to form an outpost behind which the tanks may bivouac’ (quoted in Gudmundsson 2004: 139). By early 1942, the importance of motorized infantry was more fully realized and an armoured division replaced one of its two armoured brigades with an infantry brigade, which meant that, with the motor battalion from the remaining armoured brigade, the division comprised four infantry and four tank battalions. After 2nd KRRC deployed to the Middle East in December 1941, motor companies, consisting of a carrier platoon plus two motor platoons and equipped with four 2-pdr anti-tank guns, were more able to cope with enemy tanks; each also had a section of 3in mortars to better fend off *Schützen*. The battalion served in 7th Motor Brigade, 7th Armoured Division, but only in January 1943, equipped with APCs and Vickers machine guns, was it fully able to fight alongside tanks as part of 4th Light Armoured Brigade.

UNIT ORGANIZATIONS

German

The *Schützen-Bataillon* (958 all ranks: 28 officers and 930 other ranks) varied in organization, especially with regard to allocation of heavy weapons; some mounted one of the battalion's three *Schützen-Kompanien* on motorcycles. Within each standard *Schützen-Kompanie*, there was a *Maschinengewehr-Gruppe* (two MG 34) and three *Schützen-Züge*. Each *Schützen-Zug* had 45 men (all ranks) and seven Kfz 70 light trucks; it consisted of a *Granatenwerfer-Gruppe* (one 5cm GrW 36) and three *Schützen-Gruppen*. Transported in two Kfz 70 trucks, each *Schützen-Gruppe* fielded 12 other ranks; most were equipped with the Kar 98k rifle, but two pistol-armed men crewed an MG 34 light machine gun.

For some battalions – for example, those of 3. Panzer-Division, which had a single *Schützen-Regiment* of three battalions – the *schwere-Kompanie* comprised an *Infanteriegeschütz-Zug* (two 7.5cm IG 18), a *Panzerjäger-Zug* (three 3.7cm PaK 35/36) and a *Pionier-Zug*. Other battalions – for example, those serving with 7. Panzer-Division, which had two *Schützen-Regimenter*, each with two battalions – each had a couple of *Infanteriegeschütz-Züge*, a *Panzerjäger-Zug* and a *Granatenwerfer-Zug* (six 8.1cm GrW 34), with the battalion *Pionier-Zug* attached to battalion HQ.

In 3. Panzer-Division, a *Maschinengewehr-Kompanie* would also exist, consisting of a couple of *Maschinengewehr-Züge* (each with four MG 34) and a *Granatenwerfer-Zug*; in 7. Panzer-Division, which did not have separate *Maschinengewehr-Kompanien*, a *Maschinengewehr-Zug* (instead of a *Maschinengewehr-Gruppe*) was attached to each *Schützen-Kompanie*, and each *Schützen-Gruppe* would have 14 other ranks and a couple of light machine guns. In 10. Panzer-Division, which did not have a *Kradschützen-Bataillon*, each of the two battalions of its two *Schützen-Regimenter* had a *Maschinengewehr-Kompanie* but not a *schwere-Kompanie*; *Pionier-Züge* were missing altogether, and a *Panzerjäger-Kompanie* (12 3.7cm PaK 35/36) with a *schwere-Kompanie* (two 15cm sIG 33 and six 7.5cm IG 18) existed at regimental level.

British

The motor battalion (790 all ranks: 25 officers and 765 other ranks) had an HQ company and four motor companies. The HQ company comprised an HQ group, a signals platoon and an administrative and transport platoon with 19 trucks. Each motor company had an HQ platoon, scout platoon and three motor platoons. The scout platoon had an HQ with two carriers and three sections, each with three carriers. Each motor platoon (30 all ranks including four drivers for four 15-cwt trucks) had an HQ group with an officer and four other ranks equipped with a 2in mortar with 72 rounds, and three sections, each with seven other ranks equipped with Lee-Enfield Mk III rifles, one Bren light machine gun with 1,000 rounds and one Boys anti-tank rifle with 200 rounds.

The infantry battalion (668 all ranks: 22 officers and 646 other ranks) had an HQ company and four infantry companies. The HQ company included a signals platoon, anti-aircraft platoon (four trucks, each carrying a Bren and a Boys anti-tank rifle), mortar platoon (two 15-cwt trucks each carrying two 3in mortars), carrier platoon (HQ carrier and three sections each with three carriers, but with only the section commanders' carriers carrying a Boys anti-tank rifle as well as a Bren), pioneer platoon and administrative platoon. Each infantry company had an HQ group (two officers and ten other ranks) and three platoons. Infantry platoons each had an HQ group (for one platoon commanded by an officer, and for the other two by a platoon sergeant-major) equipped with a 2in mortar and Boys anti-tank rifle carried in the platoon's 15-cwt truck, and three sections each of eight other ranks equipped with Lee-Enfield Mk IIIs and a Bren gun.

The pioneer battalion (648 all ranks: 24 officers and 624 other ranks) had a similar structure to the infantry battalion, but pioneer platoons had four instead of three sections, and the HQ company lacked the carrier and mortar platoons. Furthermore, each platoon had a single Bren and Boys; these were carried by the platoon's HQ group.

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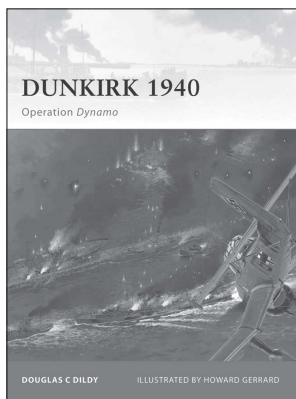
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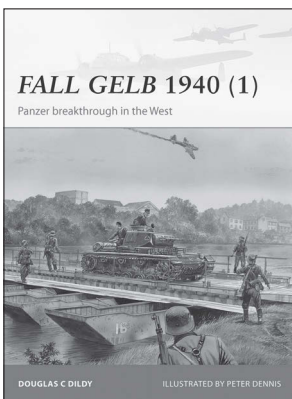
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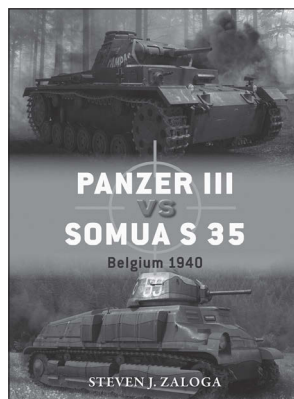
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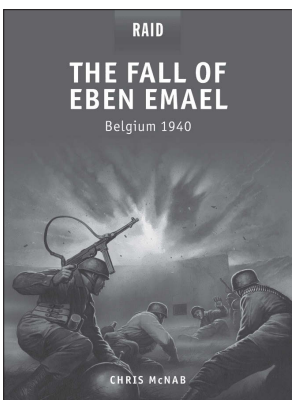
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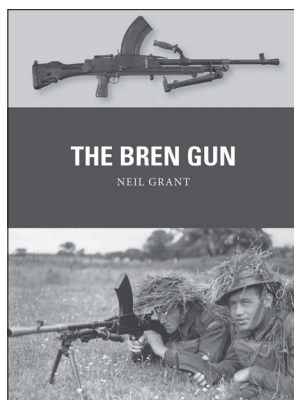
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